AN OVERVIEW OF WATER QUALITY IN LAKE MANITOBA, MANITOBA, CANADA

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Building for the Future

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SUMMARY

Lake Manitoba, one of several lakes in central Manitoba remaining after glacial Lake Agassiz receded about 10,000 years ago, is used for recreational purposes, supports aquatic life, and provides water supplies for livestock. Adjacent marshes provide habitat for abundant waterfowl and other wildlife. The marshes also provide a source of native hay and pasture for livestock. Water level control on Lake Manitoba has been the focus of much work, dating back to at least 1904.

The following report provides an overview of Lake Manitoba water quality with an emphasis on the south basin. Water quality data for Lake Manitoba extends to 1928 but the majority of the data were generated since the 1970s (Bortoluzzi 2002). Bortoluzzi's (2002) annotated bibliography is a compilation of several hundred substantive references on Lake Manitoba and adjacent water bodies. Some of these identified useful historic and current water chemistry data that were also included in this assessment.

Data were statistically compared to determine if water quality conditions may have changed between time periods and to determine if there were differences between the north and south basins. As well, data were compared to Manitoba Water Quality Standards, Objectives, and Guidelines necessary to support important water uses on Lake Manitoba.

Sufficient data were available for 28 variables to make statistical comparisons between data collected during the 1970s and data collected beginning in the early 1990s. The findings can be summarized as follows:

- There were statistically significant differences in colour and turbidity in the south basin between the 1970s and the 1990s. Available turbidity data from the 1950s appears similar to the 1990s while colour appears to have been slightly higher in the 1950s than during the 1970s or the 1990s.
- Generally, phosphorus appears higher in the south basin than in the north basin. There appears to have been an increase in phosphorus from the 1960s to the 1970s. Although there may have been some change between the 1970s to the 1990s but when the two sites near Delta were compared there was no significant difference in average total phosphorus.
- The south basin of Lake Manitoba is likely mesotrophic, as evidenced by both phosphorus and chlorophyll *a* concentrations. This implies that the lake is capable of supporting a healthy community of aquatic life, but nuisance blooms of algae may occur periodically.
- Salinity is relatively high in Lake Manitoba and much of this is thought to arise from the intrusion of saline groundwater at the west side of the lake. High salinity may interfere with the use of the lake as a source of water for domestic consumption and as a source of water for irrigation of some sensitive crops.
- The south basin of Lake Manitoba is relatively alkaline, with a pH of 8.5 or greater one third of the time. This pH may cause eye irritation for some bathers.
- Relatively high bacteria densities occasionally have been detected near beach areas in the south basin of Lake Manitoba. Monitoring has indicated that these relatively high densities occur for only a short period of time, before returning to normal, low densities.

- Concentrations of trace elements and toxic metals such as arsenic, copper, nickel, plus others did not exceed Manitoba Water Quality Standards, Objectives, and Guidelines.
- The commonly used herbicide 2,4-D, was detected on several occasions in Lake Manitoba, but did not exceed Manitoba Water Quality Standards, Objectives, and Guidelines.
- Dicamba, a herbicide often contained in formulations with 2,4-D, was detected on one occasion. The observed concentration was above the Manitoba Water Quality Standards, Objectives, and Guidelines for the protection of water used for irrigation.
- The herbicide MCPA was detected on two occasions. On these occasions, the observed concentrations exceeded Manitoba Water Quality Standards, Objectives, and Guidelines for the protection of water used for irrigation and for the protection of aquatic life. It is unlikely that water is used from this location for irrigation. Although some short-term affects on aquatic life potentially may have occurred, it is unlikely that long-term effects would have been realized since concentrations were less than the limit of detection on the next sampling occasion.
- Three main tributaries provide water to Lake Manitoba in addition to a small amount from local inflow. The Waterhen River accounts for about 80 % to 90 % of the water entering Lake Manitoba. The Waterhen River influences water quality mainly in the north basin. The Whitemud River and Assiniboine Diversion account for the remaining 10 % to 20 % and exert water quality influences mainly in the south basin. As expected, cursory water quality modelling indicates that water quality changes in Lake Manitoba track changes observed in the tributary streams, but the amplitude of changes are moderated in the lake.
- Application of the Canadian Council of Ministers of the Environment's Water Quality Index (CCME WQI) indicates that water quality in Lake Manitoba ranges between "good" and "fair". This means that there are rare exceedances of Manitoba Water Quality Standards, Objectives, and Guidelines with occasional departure from desirable quality and that there is a minor or occasional degree of threat or impairment.

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INTRODUCTION

Lake Manitoba was formed about 10,000 years ago as a remnant from glacial Lake Agassiz. As the last ice sheet began to retreat from Manitoba, Lake Agassiz first drained south to the headwaters of the Mississippi River, then later began to flow north (Williamson 1995). Much of Lake Agassiz was eventually drained northward through the Nelson River, leaving behind a number of smaller, freshwater lakes. These include lakes Manitoba, Winnipegosis, St. Martin, and Winnipeg.

Lake Manitoba has a drainage area of about 80,114 km^2. The headwaters of the lake originate in the Pasqua Hills, and the Porcupine, Duck, and Riding mountains with a number of headwater streams arising in Saskatchewan. The main tributaries flowing into the lake are the Waterhen River, the Whitemud River, and during periods of high water flows, diversion of water from the Assiniboine River. Water flows out of Lake Manitoba through the Fairford River into Lake St. Martin, then into Lake Winnipeg via the Dauphin River.

Water level fluctuations in Lake Manitoba have been a long-standing concern among both users of the lake and downstream residents (Williamson 1995). Such users include First Nations residents, cottage owners, fishers, and recreational users such as swimmers and boaters. In 1904, the first of several attempts to better control water level fluctuations was initiated by increasing the capacity of the outflow through the Fairford River channel. A control structure was later built on the Fairford River in 1934, then reconstructed in 1961 (Manitoba Water Commission 1973).

The Assiniboine Diversion channel, linking the Assiniboine River near Portage la Prairie with Lake Manitoba, was first used in 1971[1]. Dams on the Assiniboine River and the diversion were constructed as part of flood control measures for the cities of Portage la Prairie and Winnipeg. The diversion channel enters Lake Manitoba just east of the Delta Marsh Field Station (University of Manitoba). During events where Assiniboine River water is diverted into the lake, the drainage area of Lake Manitoba is increased by an additional approximately 152,314 km^2.

Water quality data are available for Lake Manitoba for a period of nearly 75 years. Manitoba Department of Mines Resources and Environmental Management (currently Manitoba Conservation) first collected water quality samples on a routine basis beginning in 1966. Water quality sampling was conducted by departmental personnel at sites shown on Figure 1 from 1966 through 1969 (C sites) and 1973 through 1977 (WQ sites). Staff from the Delta Marsh Field Station have sampled water, approximately 1 km offshore (WQ0666), on a monthly basis since 1991. Except for data collected since April 2001 samples from all three periods were analyzed at essentially the same laboratory using similar methods (currently Envirotest Laboratories and originally the Technical Services Laboratory). Since April 2001, water chemistry analyses have been conducted by CANTEST Laboratories. Temporal coverage is more complete in the most recent data set since samples were collected monthly. During the earlier period, high winds sometimes prevented collection of samples by aircraft during open water, while rough ice conditions precluded collection of samples during the winter period (Williamson 1995).

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[1] R. Harrison, personal communication (2002).

The objectives of this report are as follows:

(1). To provide a broad overview of water quality in Lake Manitoba;
(2). To identify water quality changes that may have occurred in Lake Manitoba over time;
(3). To assess the relative influence on water quality from the various major tributaries to Lake Manitoba; and
(4). To determine compliance of water quality in Lake Manitoba with the Manitoba Water Quality Standards, Objectives, and Guidelines using the Canadian Council of Ministers of the Environment's Water Quality Index.

METHODS

Data from the 1950s, 1960s, and 1970s as well as the data from water samples collected near the Delta Marsh Field Station since 1991 were used for comparisons. With the exception of the first and last sets of data where samples were only collected from the south basin of Lake Manitoba, comparisons were also made between the north and south basins. The 1960s data were available for one site in the north basin and for several sites in the south basin of Lake Manitoba. In this case, the south basin data used were monthly averages of all south basin sites. Statistical inference was made using a two-sample Student's *t*-test ($\alpha = 0.05$). Data were transformed only when distributions of untransformed data were not normal. Bar graphs showing mean variable concentrations for the north and south basins in the 1950s, 1960s, and 1970s and the south basin near the Delta Marsh Field Station for the period 1991 to 2002 were plotted for many variables for both time periods. Some data collected in August and September of 1928 (Bajkov 1930) was insufficient for statistical comparisons but mean values for available data were plotted where data was available.

Water quality data for the Waterhen River, Whitemud River, estimates for the Assiniboine Diversion (based on Assiniboine River data), and relative annual discharge for each were used to derive estimates of average annual concentrations for selected variables in Lake Manitoba. The mean annual concentration of each variable was derived as follows:

$$c_T = \frac{(c_W \cdot d_W) + (c_{WM} \cdot d_{WM}) + (c_{AD} \cdot d_{AD})}{d_T}$$

Where:
W = Waterhen R. as a tributary to Lake Manitoba.
WM = Whitemud River as a tributary to Lake Manitoba.
AD = Assiniboine Diversion as a tributary to Lake Manitoba.
T = Total from all three tributaries
d = annual discharge
c = annual variable concentration

These estimated concentrations (c_T) and actual lake concentrations were compared from 1973 to 2001 but there were several gaps in data prior to 1991. During several years the Assiniboine Diversion was not used and the diversion was only used for relatively short periods of time usually in flood stage.

As monitoring in Lake Manitoba offshore from the Delta Marsh Field Station (site WQ0666) has been carried out on a consistent monthly basis since 1991, this provided an opportunity to examine some potential trends in lake water quality since 1991. This was done for a few variables using linear regression ($\alpha = 0.05$). This assessment also includes an examination of the possible influence of the Assiniboine Diversion that enters the lake adjacent to the monitoring site using estimates of variable concentrations in the diversion based on Assiniboine River data (site WQ0014).

Lastly, the Canadian Council of Ministers of the Environment (CCME) Water Quality Index (WQI) (CCME 2000) was used to estimate the water quality conditions as they existed from 1991 through 1996 when water samples were analyzed for the widest range of variables. The CCME WQI mathematically incorporates information on water quality from three factors. The basic premise of the index is that water quality is excellent when all water quality guidelines or objectives set to protect water uses are met virtually all the time. When guidelines or objectives are not met, water quality becomes progressively poorer. This depends upon the number of water quality variables for the objectives or guidelines that are not met (Factor 1), the percentage of time they are not met (Factor 2), and an equation which uses the normalized sum of departures from objectives (Factor 3). For example, progressively smaller index values result when guidelines or objectives are exceeded for more water quality variables (*i.e.*, excursions for one variable will have less impact on water uses than simultaneous excursions for many water quality variables), when excursions occur during longer periods of time (*i.e.*, an excursion for a brief period will have less impact on a water use than an excursion for an extended period), and when the overall magnitude of excursions increase (*i.e.*, an excursion slightly above a water quality guideline or objective will have less impact on a water use than an excursion that is several times higher). Thus, the index logically incorporates information on water quality based on comparisons to guidelines or objectives to protect important water uses. The CCME WQI ranges from 0 to 100 and was used to rank water quality in categories ranging from poor to excellent. An excellent CCME WQI rating (95-100) indicates that all water uses are protected, with a virtual absence of impairment or only a minimal degree of impairment. A good water CCME WQI rating (80-94) indicates that all water quality uses are protected with only a minor degree of impairment. A fair CCME WQI rating (60-79) indicates that most water uses are protected but a few may be impaired. A marginal CCME WQI rating (45-59) indicates that several water uses may be impaired while a poor CCME WQI rating (0-44) indicates that most water uses are impaired.

WATER QUALITY SYNOPSIS

Water quality data for Lake Manitoba from 1991 through 2001 are available for more than 100 variables. These include 37 general water quality variables such as plant nutrients, major ions, and physical conditions, nine trace elements such as heavy metals, and 52 industrial and agricultural pesticides. Information on organics is only available from 1991 to 1998 thus precluding comparisons with earlier data sets. Only samples collected quarterly from 1991 through 1998 were analyzed for trace elements and organics, while other variables were analyzed in all samples. Data for previous periods is more limited in scope. Appendix 1 contains most of the data for the periods 1973 to 1977, and 1991 to 2001 while Appendix 2 includes bacteria and chlorophyll data for those same periods. Data for the periods 1966 to 1969 (Cober 1968 and Crowe 1972), and 1953 to 1954 (Thomas 1959) are included in Appendices 3 and 4, respectively. Data used in graphs but not in statistical analyses including some data for August and September 1928 (Bajkov 1930) and other more recent collections including one sample from 1963 (Gilliland 1965) are found in Appendix 5. Means, standard deviations, and numbers of samples for each of four major time periods were calculated from data in Appendix 1 and are listed in Table 1. Probabilities of statistically significant differences between time periods and basins are also indicated. Data for bacteria at each lake site and at a number of beach sites (Appendix 2) were revised to make comparisons equitable. All bacteria counts of less than 10 organisms/100 mL were treated as such, prior to deriving the geometric mean, arithmetic average (mean), and standard deviations values listed in Table 2. Prior to sampling near Delta Marsh Field Station from 1991 to present, Secchi disc and chlorophyll *a* values were only available from a site off Twin Lakes Beach from 1980 through 1983 (Appendix 2). Average and standard deviation were derived for each set of data as listed in Table 3. Average annual water quality data with four or more samples per year are listed in Table 4.

Microbiological Characteristics

- Bacteriological characteristics of Lake Manitoba offshore from the beaches appear to be excellent. The objective for protection of water bodies used for primary recreation purposes (200 fecal coliform bacteria / 100 mL) was not exceeded (Appendix 2). Geometric means of fecal coliform bacteria using < 10 bacteria / 100 mL as the lower analytical limit indicated average bacteria concentrations of near 10 or < 10 bacteria / 100 mL at sites sampled in the lake (Figure 2). Where the more ubiquitous total coliform bacteria were measured, densities of this indicator never approached 200 and were most often < 10 total coliform bacteria / 100 mL. Lake Manitoba beaches sampled in swimming areas, generally less than 100 m from shore, showed considerably higher geometric mean fecal coliform bacteria concentrations (Figure 2). Sampling for individual days indicated that near shore samples relatively frequently exceeded 200 fecal coliform bacteria / 100 mL.

Plant Nutrients and Related Variables

- Phosphorus is the plant nutrient most often limiting the growth of rooted aquatic plants and algae at least in lakes. Total phosphorus did not change between basins in the 1960s (Table 1). Between the 1960s and 1970s there was also no change in total phosphorus in the south basin. However, there was a significant increase in total phosphorus between the north and south basins in the 1970s (Table 1, Figure 3). The overall 1973 to 1977 south basin average phosphorus was lower than the average phosphorus near the University of Manitoba Delta Marsh Field Station (site WQ0666) from 1991 to 2001. However, the increase was not significant when comparing only the 1970s data from the site nearest Delta (WQ0075) with the data from the currently monitored site near Delta (WQ0666). For lakes, it is recommended that total phosphorus not exceed 0.025 mg/L in order to minimize the nuisance growth of algae (Williamson 1988). Average total phosphorus exceeded this objective during the 1960s, 1970s, and the 1991 through 2001 sampling periods in the south basin of Lake Manitoba. However, average total phosphorus did not exceed this objective in the north basin of Lake Manitoba during the 1960s and 1970s. It appears that phosphorus concentrations are generally higher near the south end of Lake Manitoba.

- Nitrate-nitrite nitrogen, a dissolved form of nitrogen readily used by aquatic plants, did not change between the north and south basins in the 1960s or 1970s or between the 1960s, 1970s, or the 1991 to 2001 time period. However, the average nitrate data from the 1950s was significantly greater than average nitrate-nitrite during more recent time periods (Table 1, Figure 4). An objective of 10 mg/L (Williamson 2001) for nitrate-nitrate has been established to protect water sources used for domestic consumption (Table 5). Nitrate-nitrite nitrogen rarely approaches this concentration in surface waters. Even the highest nitrate value of 3.5 mg/L on March 3, 1953 (Appendix 4) was lower than this objective. Nitrate-nitrite was nearly a hundred times lower than this objective in Lake Manitoba in more recent years.

- Ammonia is another form of nitrogen that is readily used by aquatic plants. Total ammonia did not change between the north and south basins in the 1970s or between the 1970s and the 1991 to 2001 time period in the south basin of Lake Manitoba (Table 1, Figure 5). Ammonia can be toxic to aquatic animals at relatively low concentrations. The objective (Williamson 2001) for ammonia was not exceeded in any sample collected during either time period.

- Total Kjeldahl nitrogen is a general measure of the organic forms of nitrogen that may be present, but also includes inorganic ammonia nitrogen (*i.e.*, total Kjeldahl nitrogen minus total ammonia equals total organic nitrogen). Organic forms of nitrogen may include urea originating from human or animal waste, nitrogen remaining bound in plant materials, plus others. Total Kjeldahl nitrogen increased significantly between the north and south basins of Lake Manitoba in the 1970s (Table1, Figure 6). However, the difference was not significant when comparing the 1970s with the 1991 to 2001 time period for the south basin. There are no numerical water quality objectives for total Kjeldahl nitrogen.

- Total organic carbon is a general measure of carbon contained in a number of complex materials such as tannins, lignins, and other organic acids originating from bog or marsh areas, as well as carbon often bound to the cell walls of plants. Total organic carbon increased from an average of 18.2 mg/L in the north basin to an average of 20.0 mg/L in the south basin during the 1970s. During the period of 1991 through 2001 the average total organic carbon near the Delta Field Station was significantly lower at only 13.8 mg/L (Table 1, Figure 7). When only the two sites near delta were compared this remained true (sites WQ0075 and WQ0666). The reason for this decline is not known. Water quality objectives have not been established for total organic carbon.

- Total inorganic carbon often includes calcium carbonate and other similar materials that may be available for plant and animal growth. Total inorganic carbon was significantly greater in the south basin relative to the north basin of Lake Manitoba during the 1970s. However, within the south basin total inorganic carbon did not change between the 1970s and the 1991 through 2001 period (Table 1, Figure 8). There are no surface water quality objectives for total inorganic carbon.

- Chlorophyll *a* is a green pigment contained in growing plant tissue. Chlorophyll *a*, when extracted from algae contained in a water sample, can be used as a relative measure of the extent of algae growth. Chlorophyll *a* has been measured in water samples from a site near Twin Lakes Beach from 1980 through 1983, as well as from the site near Delta Marsh Field Station for the 1991 to 2001 time period. Average chlorophyll *a* values were similar. In the 1980s, the average was 7.2 μg/L (Table 3). During the 1991 through 2001 sampling period, values ranged from < 1.0 to 63.0 μg/L with an average of 8.4 μg/L. Although an approximate Trophic State Index was not calculated, this portion of Lake Manitoba is likely mesotrophic, implying that the lake is capable of supporting a healthy community of aquatic life, but may occasionally experience nuisance algae blooms.

Dissolved Salts, Major Ions, and Related Variables

- Calcium peaked in the north basin of Lake Manitoba during the 1960s showing a significant increase from the 1950s (Table 1 and Figure 9). Magnesium and hardness tended to be higher in the south basin with significant peaks in the 1960s while, hardness, bicarbonate alkalinity and probably total alkalinity peaked in the 1950s (Table 1 and Figures 9 through 13). The total alkalinity for the 1950s was estimated using an average ratio between total and bicarbonate alkalinity for other time periods. Where available, averages for these variables were lowest in 1928, but these are based on only two samples in the south basin and four samples in the north basin collected once along the east shore of Lake Manitoba (Appendix 5 and Figures 9 through 12). Also, these samples were collected well away from the influence of the infiltration of saline groundwater near the lake's western edge. Lake Manitoba is considered to contain hard water, with hardness near or greater than 300 mg/L. Alkalinity is also high relative to many other freshwater lakes in Manitoba. Of these materials, surface water quality objectives have been established only for alkalinity for the protection of livestock drinking supplies. Lake Manitoba does not exceed this objective. Dissolved salts, major ions, and related variables are relatively high in Lake Manitoba also likely due to the infiltration of groundwater along the lake's western shoreline.

- The lowest average pH was observed in the north basin of Lake Manitoba during the 1960s while the highest average pH was observed in the south basin in the 1970s (Table 1 and Figure 14). Comparisons of all data from the south basin during the 1970s and the 1991 to 2001 period showed a significant decrease in pH. However, there was no significant difference when comparing the two time periods for water samples collected near Delta (sites WQ0075 and WQ0666). Water in Lake Manitoba is relatively alkaline, with average pH near 8.5 and exceeds the value which is the upper limit of the drinking water objective (Williamson 2001) about 33% of the time in the south basin and 19% of the time in the north basin. However, pH in Lake Manitoba rarely exceeds the upper objectives for the protection of aquatic life and primary recreation (*i.e.*, body contact recreation) of 9.0 as this occurred only twice in the south basin or about 1% of the time.

- The average conductivity was highest in the south basin of Lake Manitoba during the 1960s (Table 1 and Figure 15 and 16). Values for conductivity of 39 µS/cm and for total dissolved solids of 32 mg/L for a sample collected on April 16, 1996 appeared to be outliers. Therefore, these values were excluded from the calculations of the mean values for conductivity and dissolved solids for samples collected near Delta Marsh Field Station during the 1991 to 2001 period. Comparisons of all data from the south basin during the 1970s and the 1991 to 2001 period showed significant decreases in conductivity and dissolved solids. However, there were no significant differences when comparing the two time periods for water samples collected only near Delta (sites WQ0075 and WQ0666).

- Potassium was not sampled in the 1960s but average potassium may have been higher in the 1960s than at other times since the highest average sodium, chloride, and sulphate were observed in the south basin of Lake Manitoba during this time period (Table 1 and Figure 17, 18, and 19, and 20). If average values for all samples collected in the south basin were compared between the 1973 to 1977 and the 1991 and 2001 periods, then potassium, sodium, and chloride appeared to significantly decrease. However, there was no significant difference for sulphate and there was no significant difference when comparing the two time periods for sodium and chloride in water samples collected near Delta (sites WQ0075 and WQ0666) (Table 1). Chloride exceeded surface water quality objectives for the protection of domestic consumption water supplies and for the irrigation of sensitive field crops (Table 5). Sodium frequently exceeded the objective for the protection of domestic consumption water supplies. Sulphate did not exceed surface water quality objectives (Williamson 2001) necessary for the protection of water uses.

Trace Elements and Toxic Metals

- Statistical comparisons of average manganese concentrations in the north and south basins of Lake Manitoba during the 1970s were not possible. Early manganese testing in the north basin of Lake Manitoba used a detection limit of < 0.25 mg/L. The current aesthetic guideline for drinking water is 0.05 mg/L (Williamson 2001). However, there was one detectable manganese value in the north basin of 0.11 mg/L on June 20, 1974. Manganese concentrations did not change in the south basin between the 1970s and the 1991 to 2001 time period (Table 1 and Figure 21). When detectable, manganese exceeded the drinking water aesthetic guideline 15% of the time for all samples.

- Statistical comparisons of average extractable iron values in the north and south basins of Lake Manitoba during the 1970s indicated that there was no difference between basins. However, this may be a type II error (accepting as true the wrong hypothesis) since there was a considerable difference between the averages of 0.05 and 0.17 mg/L in the north and south basins, respectively (Table 1 and Figure 22). Average extractable iron concentrations for the north basin of the lake were slightly higher in 1928 than those observed in the south basin during the 1970s. Extractable iron concentrations did not change in the south basin between the 1970s and the 1991 to 2001 time period. Extractable and total iron were measured simultaneously on three samples beginning in October of 1997 but extractable iron analyses was dropped in favour of total iron analyses by July of 1998 (Appendix 1). Although total iron concentrations were included in average iron concentrations shown in Figure 22, total and extractable iron concentrations were not comparable as total iron concentrations were significantly greater than extractable iron concentrations from the same samples. Detectable iron exceeded the drinking water aesthetic guideline of 0.3 mg/L (Williamson 2001) 23% of the time.

- Arsenic was not detectable during the 1970s but was detected at low levels on most occasions during the 1991 to 2001 time period (Appendix 1). Differences between analytical methods and detection limits between time periods precluded comparisons (Table 1). When detected, arsenic did not exceed any surface water quality objectives established to support water uses (Table 5).

- Cadmium was detected in two of three samples in the north basin of Lake Manitoba and in one of 11 samples in the south basin during the 1973 to 1977 time period and one of 22 samples during the 1991 to 2001 time period (Appendix 1). All other data were reported as less than the analytical limit of detection. Comparisons made between the north and south basins for the 1973 to 1977 time period indicated that there were no differences between basins. Comparisons between time periods were not possible due to method and detection limit changes between time periods (Table 1). When detected, cadmium exceeded calculated objectives for the protection of aquatic life twice in the north basin and once in the south basin. This occurred during the 1973 to 1977 time period.

- Copper concentrations were either at or less than 0.010 mg/L which was the most commonly used detection limit during the 1970s and the 1991 to 2001 time period (Appendix 1). Except for one occasion on April 14, 1993, copper did not exceed surface water quality objectives. On this occasion copper exceeded the calculated objective required for the protection of aquatic life (Williamson 2001). There were no differences between the north and south basins of Lake Manitoba or between time periods (Table1).

- There was no difference in lead concentrations between the north and south basins of Lake Manitoba during the 1970s but lead concentrations decreased significantly between the 1970s and the 1991 to 2001 time period (Table 1). Lead was detected in 10 of 12 samples in the north basin and six of 15 samples in the south basin of Lake Manitoba during the 1970s, and in only one of 21 samples during 1991 to 2001 time period (Appendix 1). All other lead concentrations were reported as less than the analytical limit of detection. When detected during the 1970s, lead exceeded the calculated objective required for the protection of aquatic life on all occasions (Williamson 2001). These concentrations of lead did not exceed any other objectives. Since 1991, there was only one detection near the Delta Marsh Field Station. This occurred on April 20, 1995 and did not exceed any water quality objective.

- Nickel was detected in two samples in the north basin and one sample in the south basin of Lake Manitoba during the 1973 to 1977 time period and in three of 21 samples during 1991 to 2001 (Appendix 1). Statistical comparisons were not possible. When detected, nickel did not exceed Manitoba surface water quality objectives for the protection of water uses.

- There was no difference in zinc concentrations between the north and south basins of Lake Manitoba during the 1970s but zinc concentrations decreased significantly between the 1973 to 1977 and 1991 to 2001 time periods. Zinc was detected in three out of eight samples in the north basin and six of eight samples in the south basin collected during the 1970s and in six out of 20 samples collected during 1991to 2001 time period. Because of the limited number of detections and changes in analytical methods that reduced detection limits between the two periods, statistical comparisons are not meaningful. When zinc was detected, it did not exceed surface water any quality objective.

- Hexavalent chromium was not analyzed prior to 1991 and was not detected in any of water samples analyzed during 1991 to 2001.

- Aluminum was not analyzed prior to 1991. Average extractable aluminum during the 1991 to 2001 time period was 0.28 mg/L. Water quality objectives for drinking water are not yet available for aluminum, although guidelines are presently being developed for this element by a Federal-Provincial working group for the protection of drinking water used as sources of drinking supplies (Health Canada 1993).

Water Clarity and Related Variables

- Colour is often imparted to water by organic acids such as tannins and lignins. The highest average recorded colour was observed for the 1950s near Delta (Table 1, Appendix 4, and Figure 23). There was no difference in colour between the north and south basins of Lake Manitoba during the 1970s. There was a significant increase in colour between the 1970s and the 1991 to 2001 time periods. However, it is likely that the waters near Delta marsh are affected by tannins and lignins from the marsh water and tend to be darker near Delta than elsewhere in the lake. Colour occasionally exceeded surface water quality aesthetic objectives for water supplies for domestic consumption of 15 colour units in the 1950s and during the 1991 to 2001 time period (Appendices 1 and 4).

- Turbidity was lowest during the 1970s. Similar average turbidities occurred during the 1950s and the 1991 to 2001 time period. A significant increase in turbidity occurred between the 1970s and the 1991 to 2001 time period (Table 1, Figure 24). In the south basin of Lake Manitoba overall average turbidity increased from the 1970s. This may reflect some differences in turbidity measuring techniques during the 1970s relative to the 1950s and the 1991 through 2001 time period since the related total suspended solids in the south basin of Lake Manitoba were similar during all three periods.

- The highest average total suspended solids (TSS) was observed in the south basin of Lake Manitoba in the 1950s with similar averages in the 1970s and in the 1991 to 2001 time period. TSS concentrations are likely to be lower in the north basin than in the south basin of the lake since the average north basin TSS was significantly lower than in the south basin TSS during the 1970s (Table 1, Figure 25).

- Secchi disk measurements were available for a site near Twin Lakes Beach in the 1980s as well as the site near the Delta Research Station for the period 1991 to 2001. Average Secchi disc depths decreased significantly from 0.7 and 0.6 m, respectively (Table 3). Increases in algae concentrations reflected in chlorophyll *a* concentrations are sometimes associated with reduction in Secchi disk depth but there was no significant difference between average chlorophyll *a* concentrations between the 1980s and the period 1991 to 2001.

Dissolved Oxygen

- Adequate concentrations of dissolved oxygen are essential for the maintenance of a healthy community of aquatic life. Dissolved oxygen concentrations did not change between the sampling periods of 1973 to 1975 and 1991 to 2001 (Table 1, Figure 26). Except for one occasion (June 27, 2000), where total dissolved oxygen fell to 4.7 mg/L, oxygen levels were maintained at or in excess of an objective of 5.0 mg/L (Appendix 1). This objective is generally considered necessary for the maintenance of an aquatic life community indigenous to this region of Lake Manitoba.

Pesticides

- Pesticide data are only available for the first seven years of the 1991 to 2001 time period. Forty-five of the 48 pesticides included in the analyses were not detected in any sample.

- The three pesticides occasionally detected included dicamba, MCPA, and 2,4-D. Dicamba was detected on one occasion, MCPA was detected on two occasions, and 2,4-D was detected on five occasions. All three pesticides are phenoxy herbicides commonly used in the Canadian prairies for the post-emergent control of broad-leafed weeds.

- When detected, concentrations of dicamba and 2,4-D did not exceed water quality objectives for the protection of water sources used for domestic supply or for the protection of aquatic life communities. However, one detection of dicamba at 0.02 µg/L exceeded the water quality objectives for irrigation of 0.006 µg/L (Williamson, 2001). Objectives for MCPA for irrigation (0.025 µg/L) and for the protection of aquatic life and wildlife (2.6 µg/L), were both below the initial analytical limit of detection used at the Environmental Sciences Centre. Two detections of MCPA, one in October 1993 (12.0 µg/L), and one in July 1995 (13.0 µg/L) exceeded both objectives by a considerable margin. The objective for the protection of aquatic life and wildlife was derived by applying a safety factor to the lowest observed effect concentration (26.0 µg/L) in a study on a species of algae (Williamson, 1995). It is unlikely that these waters would be used for irrigation. A long-term threat likely was not posed to aquatic life since the measured value in Lake Manitoba was below the level at which effects were observed in the laboratory study and all subsequent data returned to below the limit of detection.

- The three pesticides could have originated from local or regional use, or could have been deposited in Lake Manitoba following aerial transport. Several phenoxy herbicides have been recorded in precipitation elsewhere in the prairies.

Influence of Tributaries on Water Quality Changes in Lake Manitoba from 1973 to 2001

Data for the Waterhen River, Whitemud River, estimates for the Assiniboine Diversion based on Assiniboine River data (Table 6 and Appendix 6) and relative discharge (Appendix 7)[2] were used to estimate annual mean concentrations for several important water quality variables entering Lake Manitoba. If local inflows are ignored, then of the three main tributaries, the Waterhen River tends to contribute 80% to 90% of the volume to Lake Manitoba, while the Whitemud River and diversions from the Assiniboine River contribute the remainder of the water. Some additional information may be gained by examining a few variables in lake water for the most recent period of water sampling, 1991 through

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[2] Average discharge data for the Waterhen and Whitemud rivers and the Assiniboine Diversion was supplied by A. Warkenton (personnal communication, 2002).

2001. During this period water quality samples were collected at site WQ0666 off shore from Delta Marsh and immediately west of the outlet of the Assiniboine Diversion (Figure 1).

- There was frequently a relationship between total suspended solids (TSS) and total phosphorus. Annual averages of TSS and total phosphorus in Lake Manitoba tended to follow a similar pattern as those of the estimated concentrations of input from all the tributaries, although the pattern was less amplified.

- Average total suspended solids contributions from all three rivers flowing into Lake Manitoba were estimated from 1981 through 1984, and from 1987 through 2001 (Figure 27). The two main contributing tributaries were the Waterhen River being predominant in 10 out of 19 years and the Assiniboine Diversion being predominant in the remaining nine years (Table 7). Although the Assiniboine River was only diverted for short periods, these were during times of flooding and tended to carry higher sediment loads due higher flow rates. During six of the 19 years, the diversion did not operate. During the most recent period, 1991 through 2001, there were several occasions when estimated peak TSS concentrations from the Assiniboine Diversion were not matched at the nearby site in Lake Manitoba (Figure 28). There was no significant trend in TSS concentrations in the lake between 1991 and 2001 in Lake Manitoba near Delta Marsh.

- Total phosphorus contributions from all three rivers flowing into Lake Manitoba were estimated from 1981 through 1984, and 1988 through 2001 (Figure 29). During these years, the Waterhen River also accounted for the largest portion of total phosphorus from any of the three rivers during 11 of the 18 years (Table 7). Except for one year, total phosphorus tended to follow the same pattern as the total suspended solids in the Assiniboine Diversion water, and accounted for the largest portion of total phosphorus from any of the three rivers during seven of the 18 years. During the most recent period, 1991 through 2001, there was a significant increase in total phosphorus at the Lake Manitoba site off shore from Delta Marsh and it appears likely that this was probably due at least in part to contributions from the Assiniboine Diversion (Figure 30).

- There were some parallels between lake averages and estimated average tributary concentrations of total Kjeldahl nitrogen, nitrate-nitrite nitrogen, and ammonia but there were also occasions when these diverged widely (Figures 31 through 33). Total Kjeldahl nitrogen and nitrate-nitrite contributions from all three rivers flowing into Lake Manitoba were estimated from 1981 through 1984, and 1988 through 2001. During these years, the Waterhen River accounted for the largest portion of total Kjeldahl nitrogen from any of the three rivers during 17 of 18 years (Table 7). Only in 1995 was the Assiniboine diversion contribution larger.

- The Waterhen River and the Assiniboine Diversion each accounted for the largest proportion of nitrate-nitrite nitrogen from any of the three rivers during eight of 18 years (Table 7). In 1982, the Whitemud River contributed the largest proportion of nitrate-nitrite nitrogen.

- Total ammonia was only measured from 1988 through 2001. The Waterhen River contributions accounted for the largest portion of total ammonia during 12 of 14 years (Table 7). The Assiniboine Diversion contributions were only greater in 1995 and 1999.

- There were clear parallels between lake averages and estimated average tributary concentrations of specific conductivity, total dissolved solids, and some of the major ions such as sodium and chloride. It appears that, despite some fluctuation, each of these variables has been relatively stable or may have decreased somewhat between 1991 to 2001 (Figures 34 to 39).

- Specific conductivity from all three rivers flowing into Lake Manitoba were estimated from 1981 through 1984 and 1988 through 2001 while total dissolved solids were estimated from 1987 through 2001. Of the three streams, the Waterhen River provided the major contributions of these related variables in each year where loadings were possible to estimate (Table 7). During the period 1991 through 2001, conductivity concentrations at the Lake Manitoba site offshore from Delta Marsh decreased significantly (Figure 35). It appears that some of the water samples collected from Lake Manitoba during the months of April during this period may have inadvertently contained melt water from ice and snow as well as lake water. Even if the April samples were removed there was still a significant decrease in conductivity over the years. It appears likely that the decrease in conductivity was probably due at least in part to contributions from the Assiniboine Diversion. The annual averages for total dissolved solids followed the same pattern as the associated conductivity (Figure 36)

- Sodium, chloride, and sulphate loading estimates were possible for only nine years but these ions followed the same trends as the total dissolved solids and conductivity of which they are a part Figures 37 to 39). Again, the Waterhen River was the main contributor for these variables except in the case of sulphate in 2001 where the Assiniboine Diversion contributed slightly more than the Waterhen River. However, the estimated sulphate contribution for these two streams plus the Whitemud River provided a considerably lower estimate of potential lake concentrations of sulphate compared to average sulphate in Lake Manitoba near Delta. This likely indicated that a considerable amount of sulphate appears to be contributed by other sources including saline intrusions into the lake and possibly inflow of water from Delta Marsh.

- Average pH in Lake Manitoba between 1991 and 2001 has been relatively stable although there may have been a slight drop in pH in 2001. However, the average pH in the tributaries contribution tended to be more variable (Figure 40). Laboratory pH contributions from all three rivers flowing into Lake Manitoba were estimated from 1981 through 1984, and 1987 through 2001. During all 19 years these years the Waterhen River was the major influence (Table 7).

Historically, many of the variables tended to be lower in concentration in the north basin. When the average annual variable concentrations for Lake Manitoba were compared to estimated contributions from tributaries, the tributary concentrations may not always reflect real trends in the south basin of Lake Manitoba. The Waterhen River contributes the major portion of discharge into Lake Manitoba and is clearly the predominant influence in the north basin of Lake Manitoba. It appeared to influence water quality through the Narrows region as well. There was also a tendency for the concentrations of some variables to be somewhat higher near the south shore than further north in the south basin. Since 1991, Lake Manitoba water sampling has been restricted for the most part to the southern part of the south basin and to the site near Delta Marsh Field Station and the Assiniboine Diversion in particular. Unfortunately, more recent data from the north basin are not available.

Canadian Council of Ministers of the Environment (CCME) Water Quality Index

Manitoba Water Quality Standards, Objectives, and Guidelines used for calculation of the CCME Water Quality Index (CCME WQI) are shown in Table 8 (Williamson 2001). The sampling period of 1991 through 1996 included enough variables in the analyses for an accurate assessment using the CCME WQI (CCME 2000). Excursions over the specified objectives were common for total phosphorus and specific conductivity but the effects of these were relatively minor in comparison to the effects of two excursions for the phenoxy acid herbicide MCPA. Objectives for MCPA for protection of irrigation (0.025 µg/L) and for the protection of aquatic life and wildlife (2.6 µg/L) were both below the initial analytical limit of detection used at the Environmental Sciences Centre but non-detections were considered non-excursions. Two detections of MCPA, one in October 1993 (12.0 µg/L) and one in July 1995 (13.0 µg/L), exceeded both objectives by a considerable margin. If the MCPA objective for irrigation is used, then the ratings for 1993 and 1995 drop to nearly 50 and the overall average rating for all seven years approaches 70. However, these spikes in MCPA appear to be highly unusual in a lake and it is likely that the lake water would be not be used for irrigation. If the water quality objective intended for the protection of aquatic life were used, then the ratings fluctuate above and below 80 with a score in 1996 of 83.6 and average 79.6 which indicates that the lake water quality near Delta is between "good" and "fair".

SUMMARY OBSERVATIONS

Of the three major streams entering Lake Manitoba, the Waterhen River contributes most of the total dissolved solids. Although this stream also appears to contribute the largest proportion of the major ions there are also contributions from other sources. Particularly in the case of sulphate, there appears to be an influence from saline groundwater intrusions into the west side of the lake and also possibly some influence from water from Delta Marsh at the south end of the lake. High salinity may interfere with the use of the lake as a source of water for domestic consumption and as a source of water for irrigation of some sensitive crops. During years when flood waters are diverted from the Assiniboine River, this stream is often the predominant contributor of suspended solids and the plant nutrient phosphorus. Both phosphorus and chlorophyll *a* concentrations in the south basin of Lake Manitoba are indicative of mesotrophic conditions. This implies that the lake is capable of supporting a healthy community of aquatic life, but nuisance blooms of algae may occur periodically. The Canadian Council of Ministers of the Environment's Water Quality Index (CCME WQI) indicates that water quality in Lake Manitoba ranges between "good" and "fair". This means that exceedances of Manitoba Water Quality Standards, Objectives, and Guidelines are generally rare for most variables, departures from desirable quality occur occasionally, and there is only a minor or occasional degree of threat or impairment.

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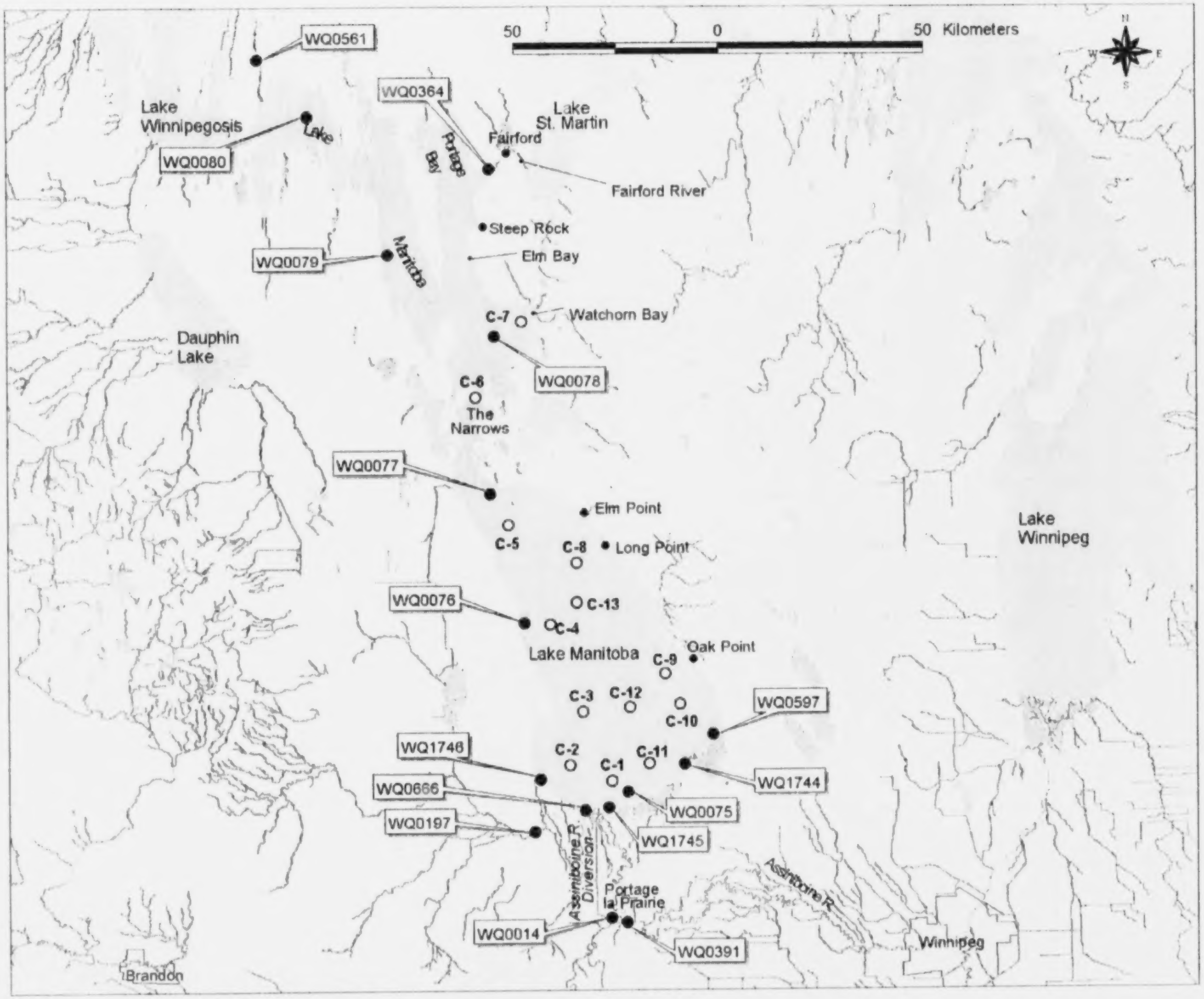
Figures 1 through 41.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C-7
Watchorn Bay
Dauphin Lake
WQ0078
C-6
The Narrows
WQ0077
Elm Point
Lake Winnipeg
C-5
C-8
Long Point
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Oak Point
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Figure 1. Water quality monitoring sites on Lake Manitoba and associated rivers.

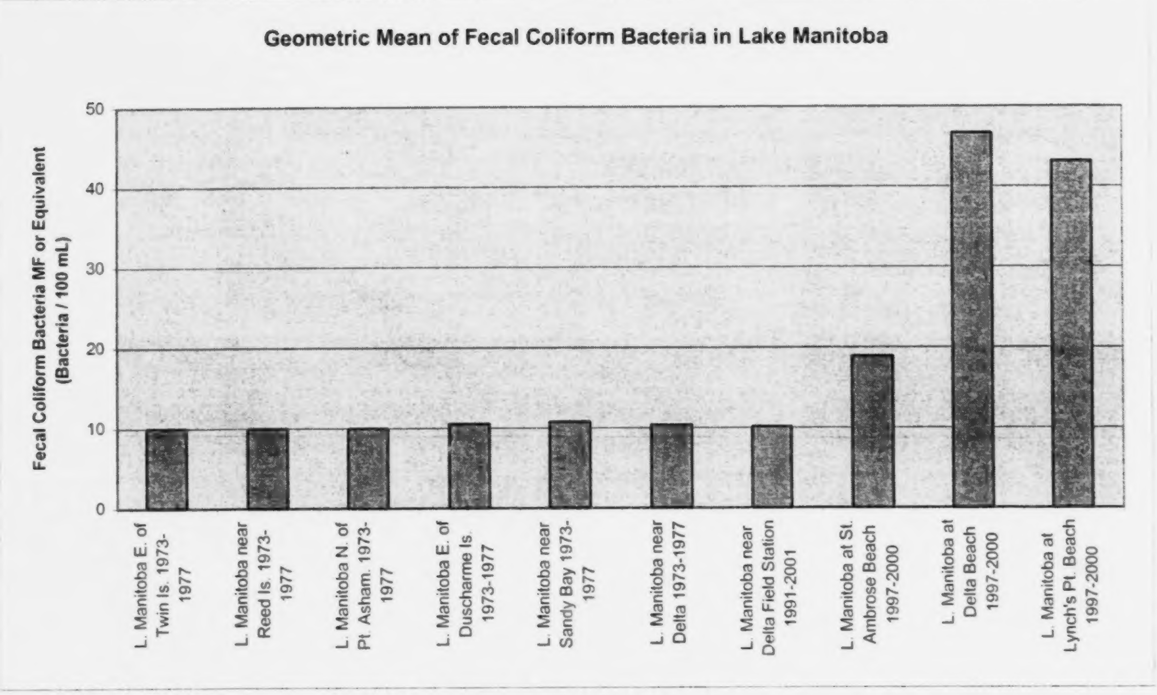
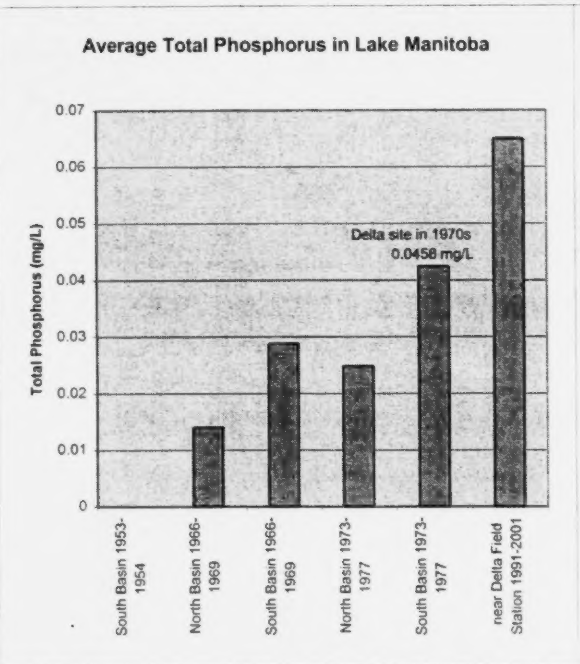


Figure 2. Geometric means of fecal coliform bacteria in Lake Manitoba.



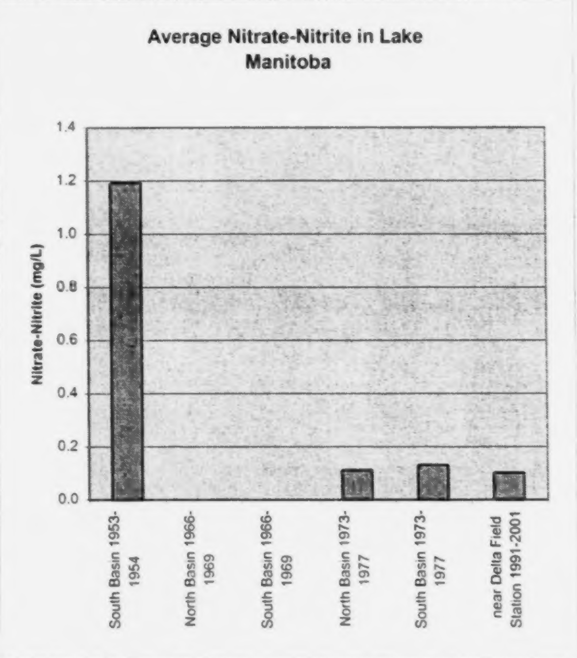


Figure 3. Average total phosphorus concentrations in Lake Manitoba.

Figure 4. Average nitrate-nitrite concentrations in Lake Manitoba.

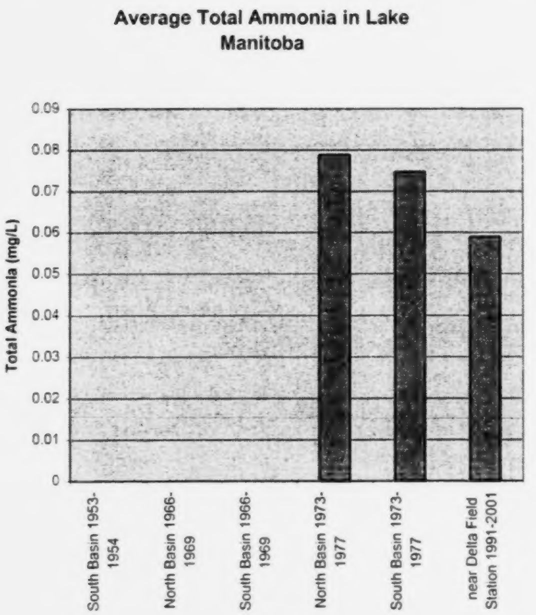


Figure 5. Average total ammonia concentrations in Lake Manitoba.

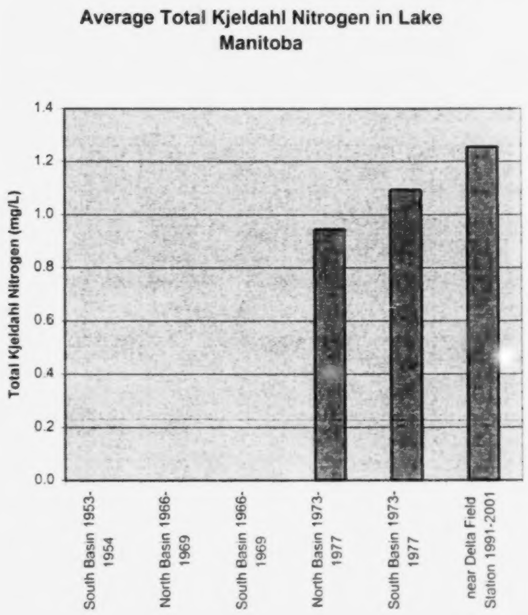


Figure 6. Average total Kjeldahl concentrations in Lake Manitoba.

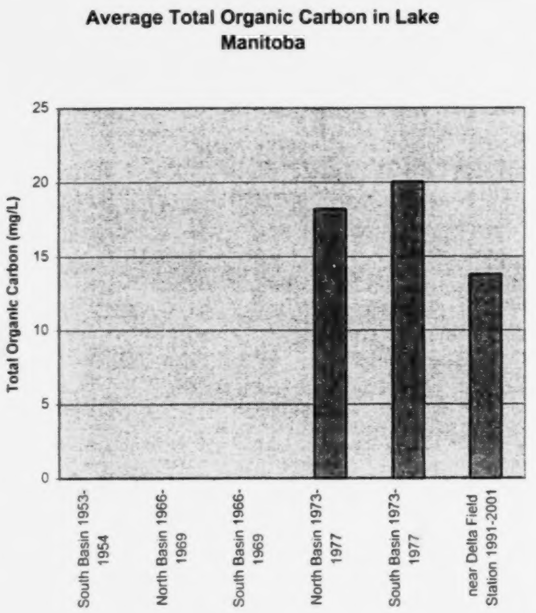


Figure 7. Average total organic carbon concentrations in Lake Manitoba.

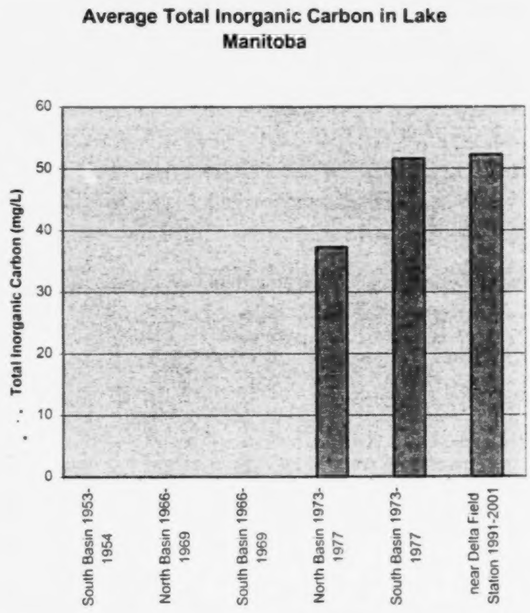


Figure 8. Average total inorganic carbon concentrations in Lake Manitoba.

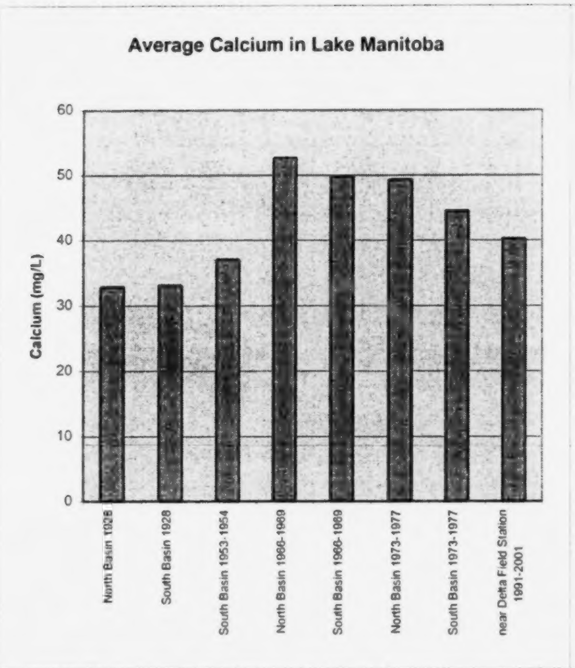


Figure 9. Average total or extractable calcium concentrations in Lake Manitoba.

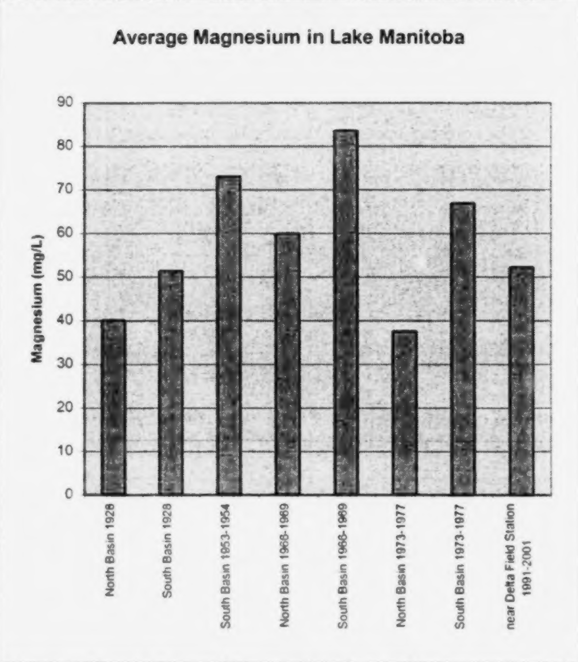


Figure 10. Average total or extractable magnesium concentrations in Lake Manitoba.

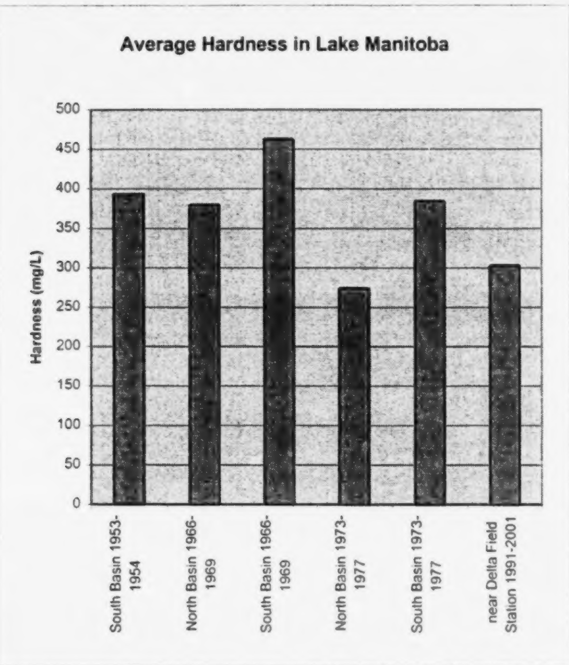


Figure 11. Average total hardness concentrations in Lake Manitoba.

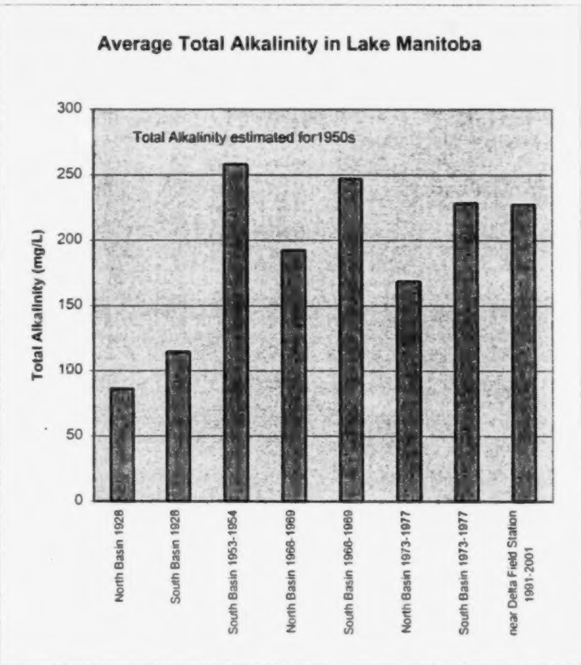


Figure 12. Average total alkalinity concentrations in Lake Manitoba.

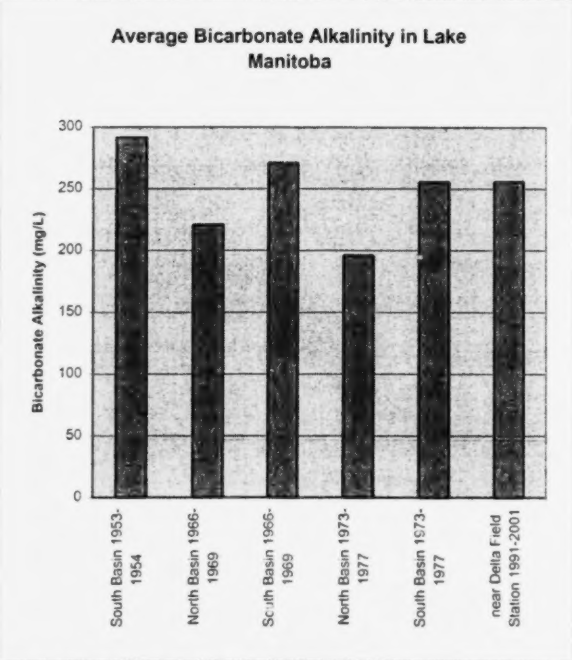


Figure 13. Average bicarbonate alkalinity concentrations in Lake Manitoba.

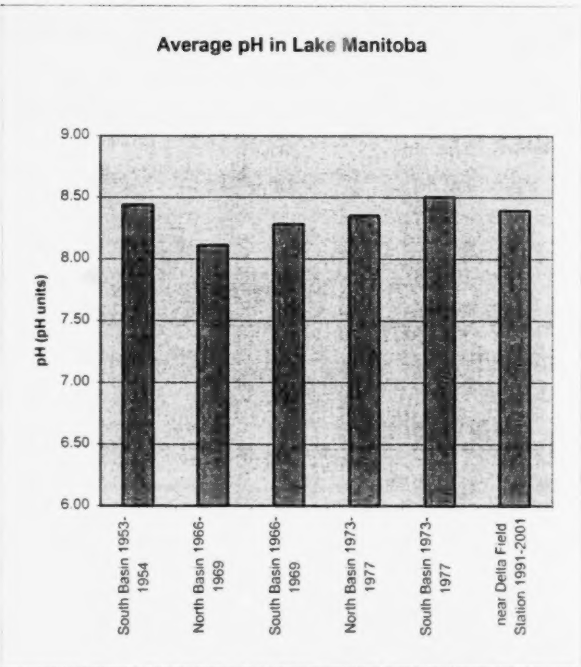


Figure 14. Average pH concentrations in Lake Manitoba.

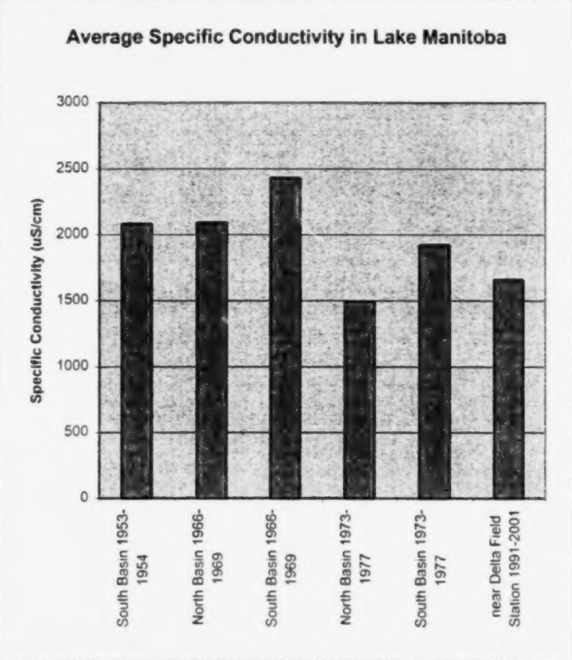


Figure 15. Average specific conductivity in Lake Manitoba.

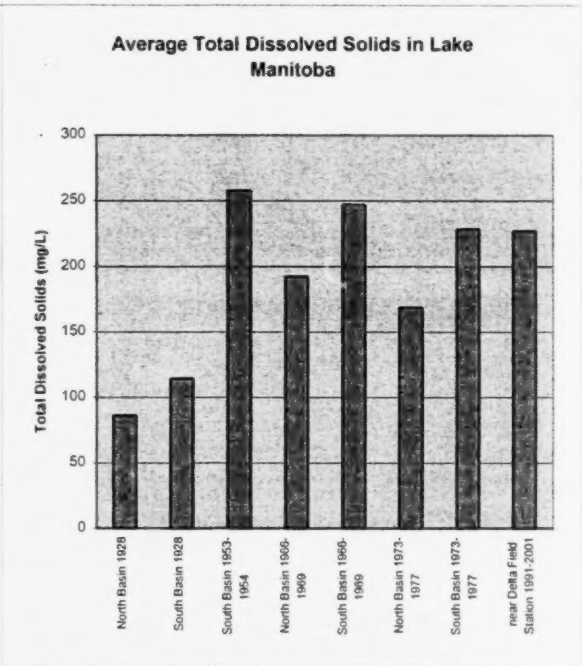


Figure 16. Average total dissolved solids in Lake Manitoba.

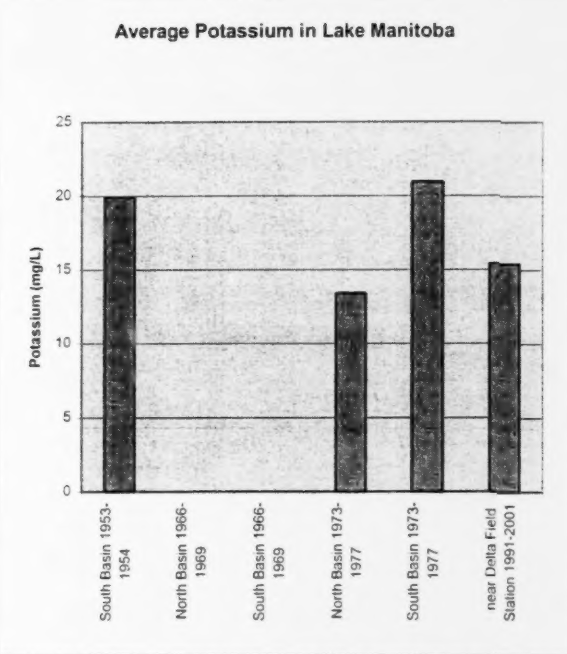


Figure 17. Average total or extractable potassium in Lake Manitoba.

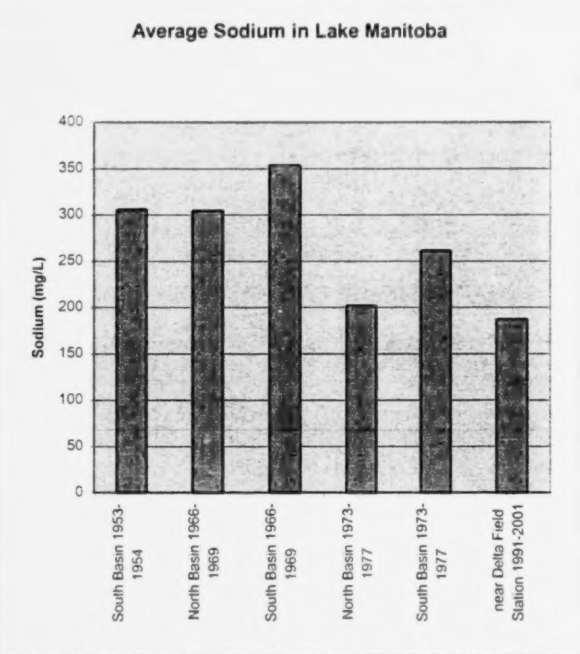


Figure 18. Average total or extractable sodium in Lake Manitoba.

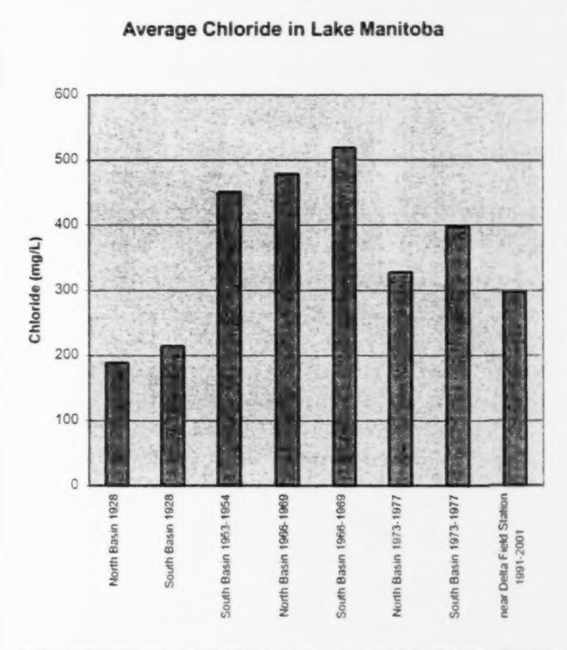


Figure 19. Average chloride in Lake Manitoba.

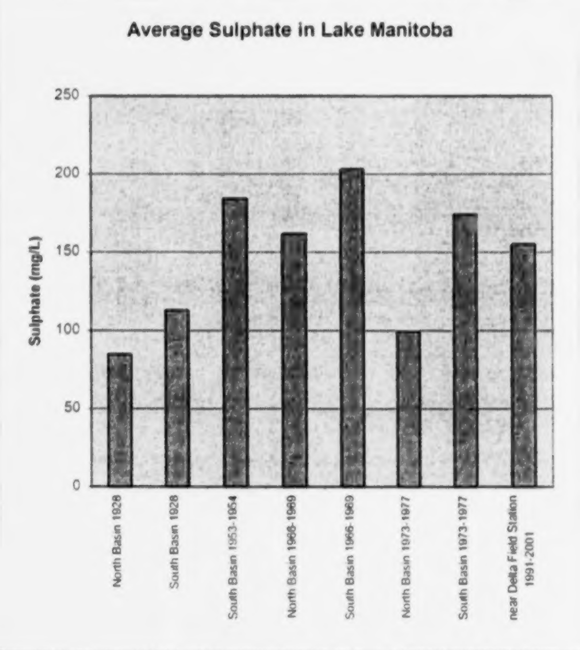
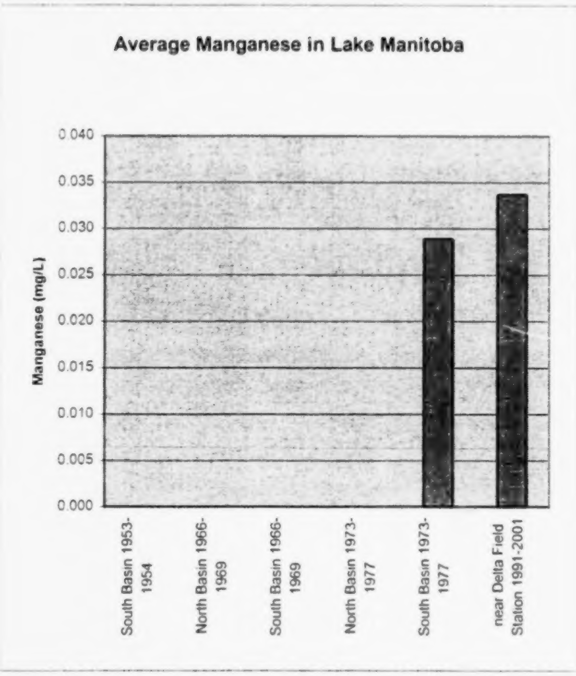
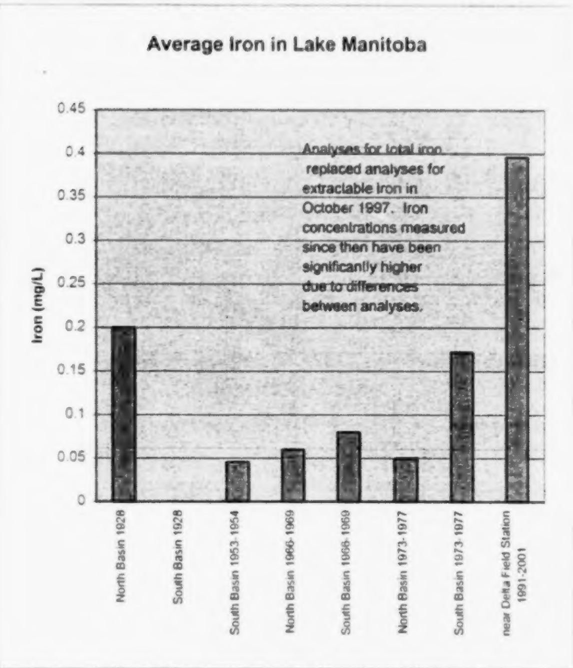


Figure 20. Average sulphate in Lake Manitoba.



Average Manganese in Lake Manitoba

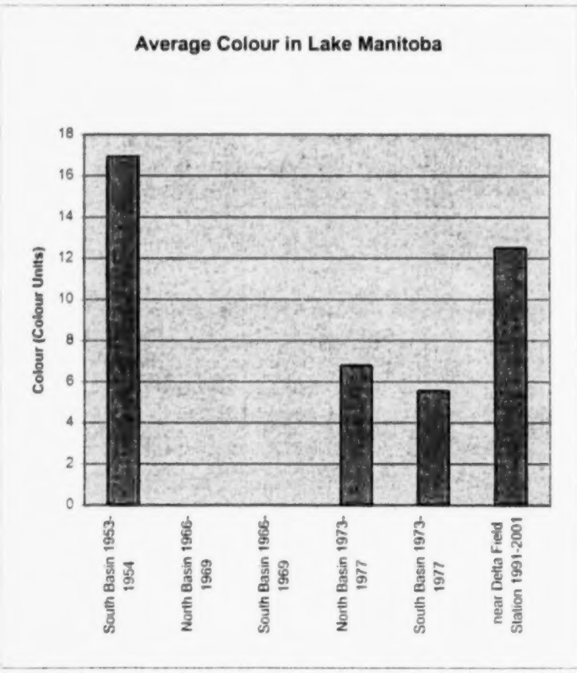
Figure 21. Average total or extractable manganese in Lake Manitoba.



Average Iron in Lake Manitoba

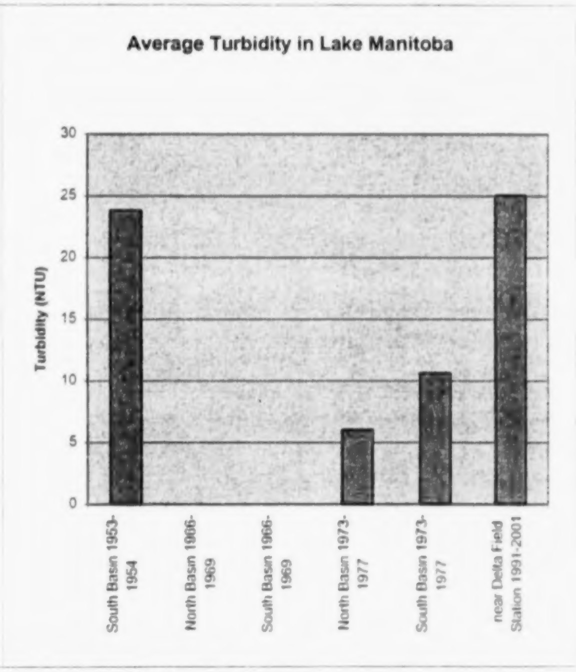
Analyses for total iron replaced analyses for extractable iron in October 1997. Iron concentrations measured since then have been significantly higher due to differences between analyses.

Figure 22. Average total or extractable iron in Lake Manitoba.



Average Colour in Lake Manitoba

Figure 23. Average colour in Lake Manitoba.



Average Turbidity in Lake Manitoba

Figure 24. Average turbidity in Lake Manitoba.

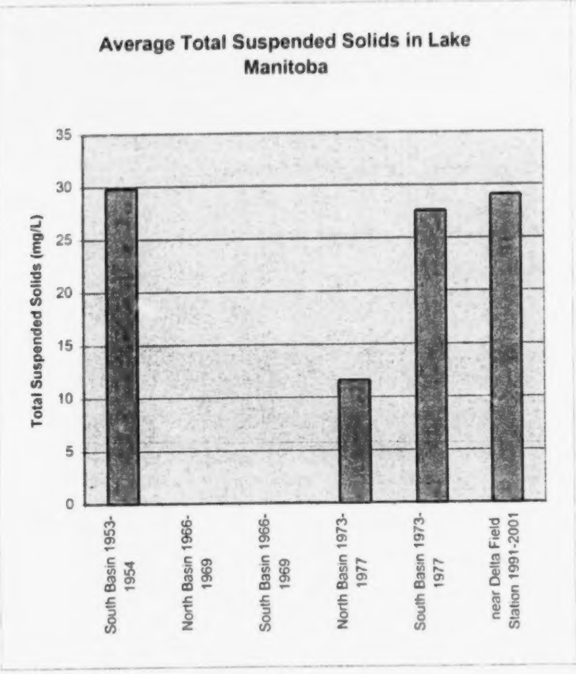


Figure 25. Average suspended solids in Lake Manitoba.

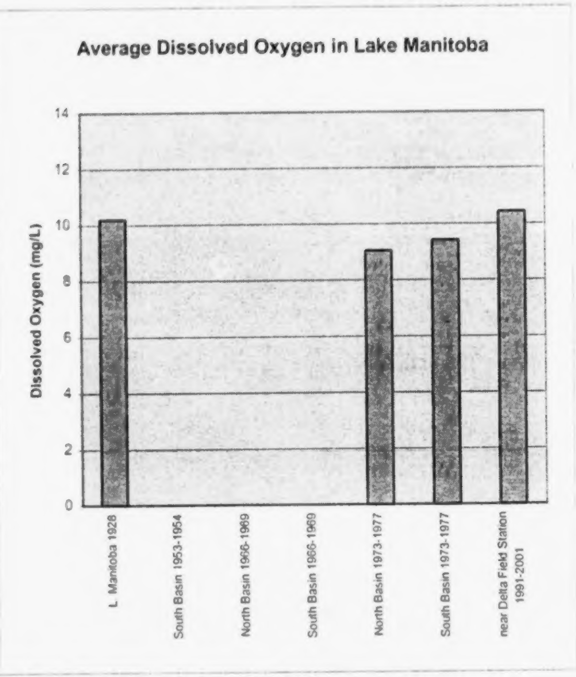


Figure 26. Average total dissolved oxygen in Lake Manitoba.

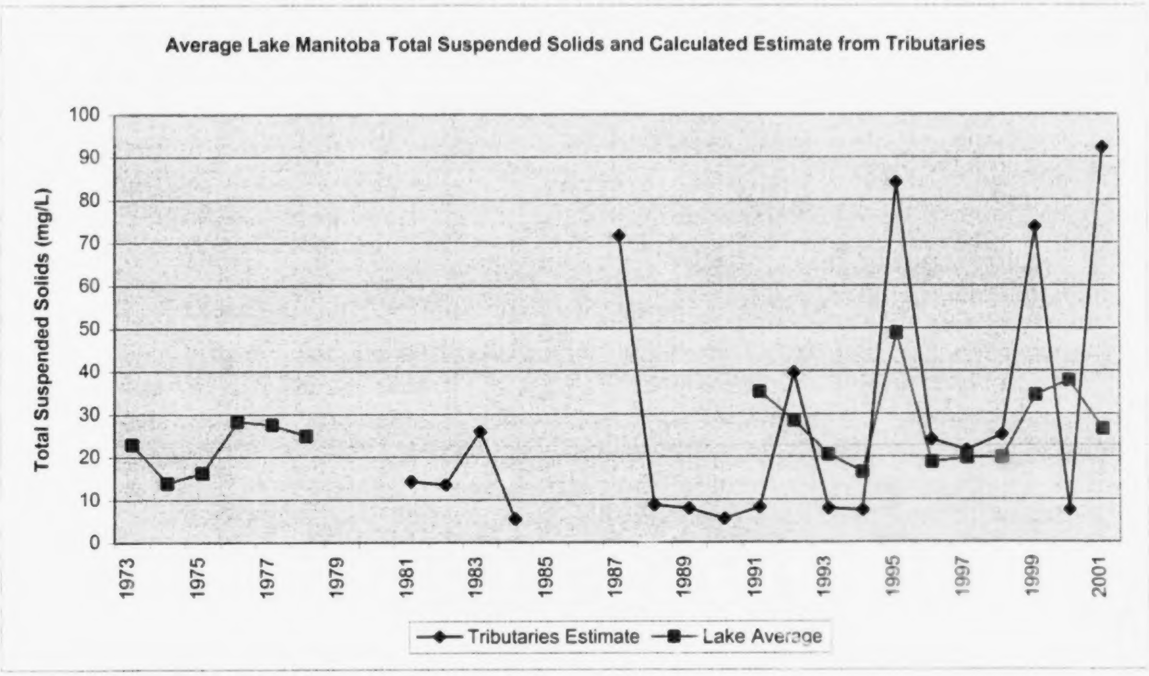


Figure 27. Average annual total suspended solids in Lake Manitoba compared to estimated input from tributaries.

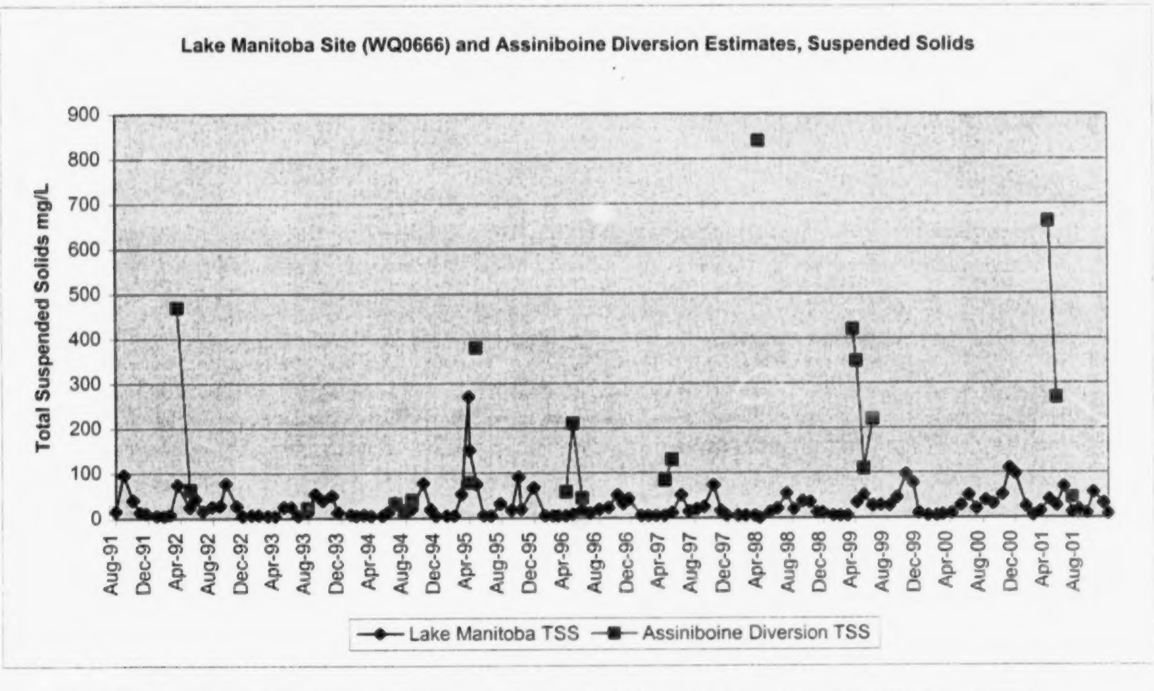


Figure 28. Lake Manitoba Site WQ0666 and Assiniboine River site WQ0014 total suspended solids, 1991 through 2001.

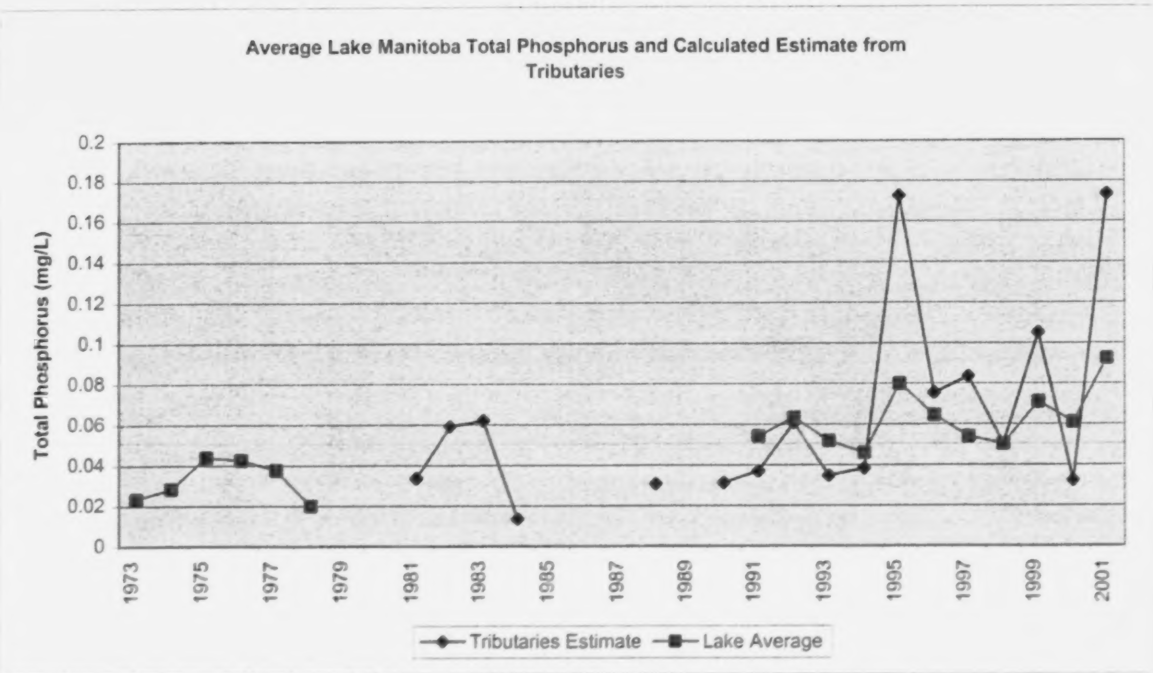


Figure 29. Average annual total phosphorus in Lake Manitoba compared to estimated input from tributaries.

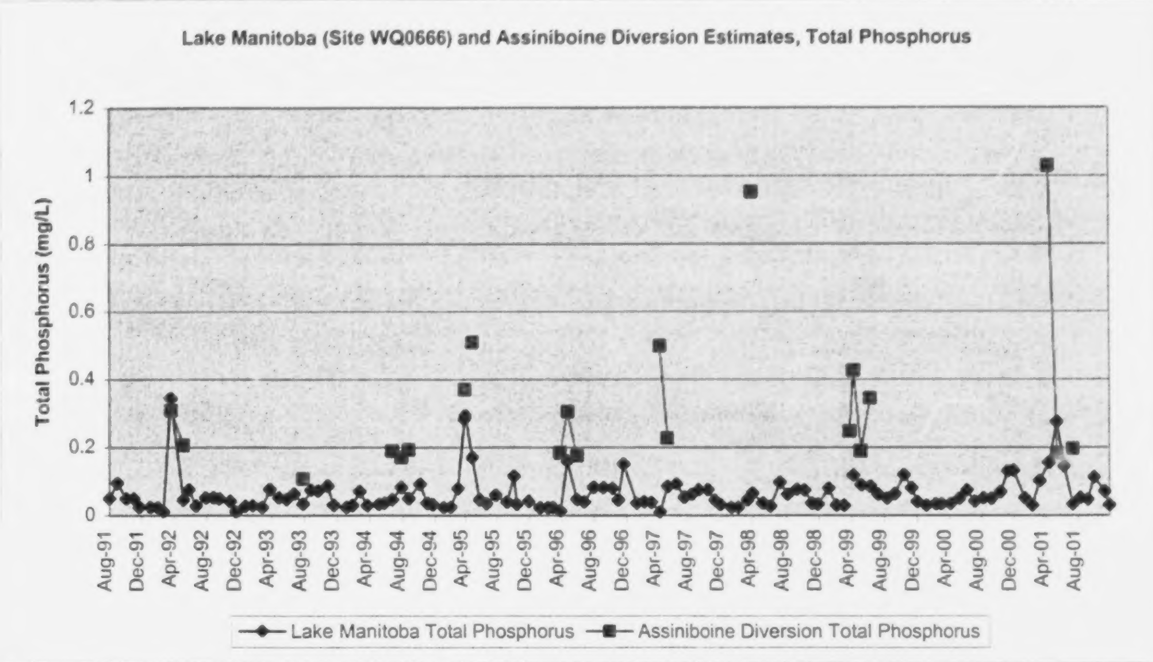


Figure 30. Lake Manitoba Site WQ0666 and Assiniboine River site WQ0014 total phosphorus, 1991 through 2001.

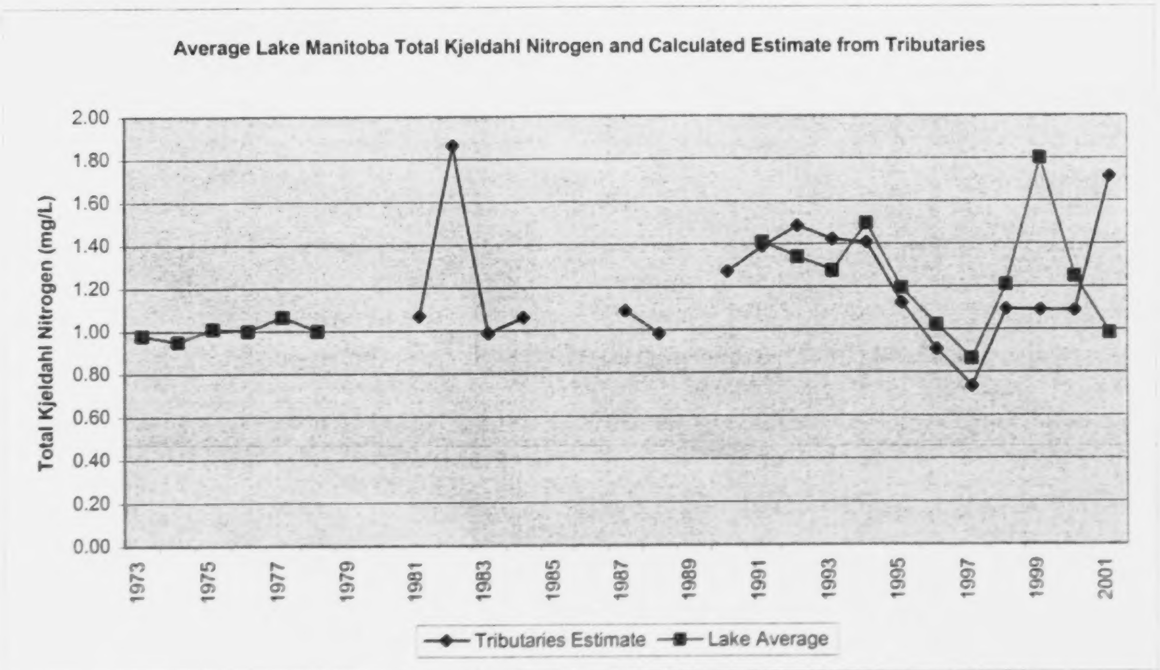


Figure 31. Average annual total Kjeldahl nitrogen in Lake Manitoba compared to estimated input from tributaries.

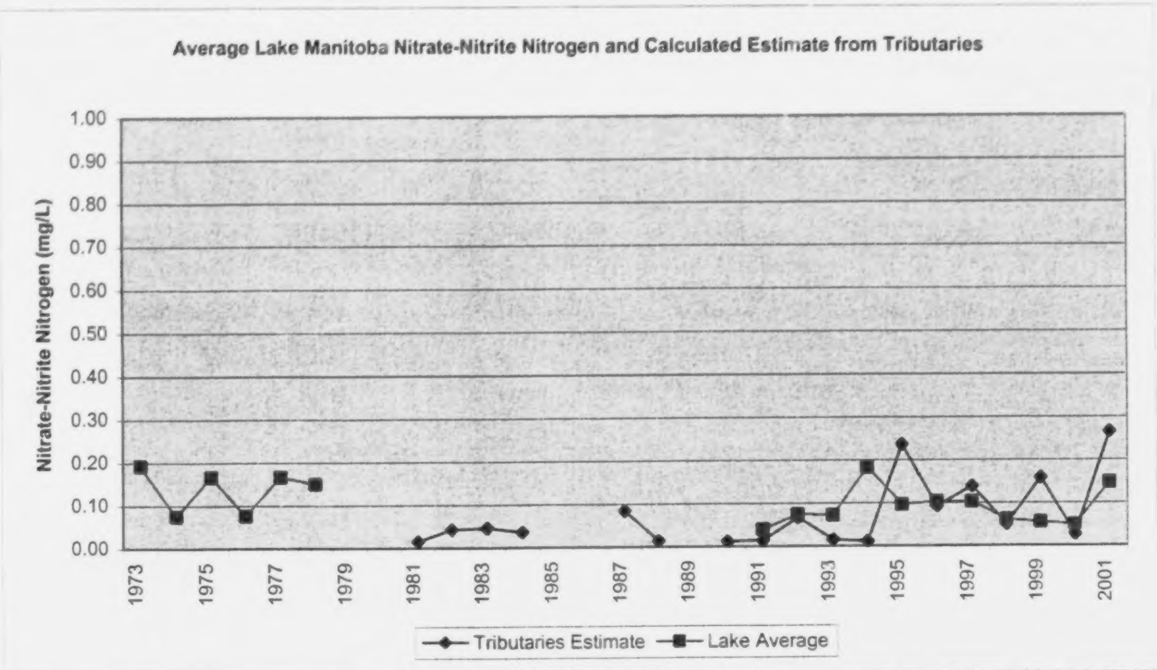


Figure 32. Average annual nitrate-nitrite nitrogen in Lake Manitoba compared to estimated input from tributaries.

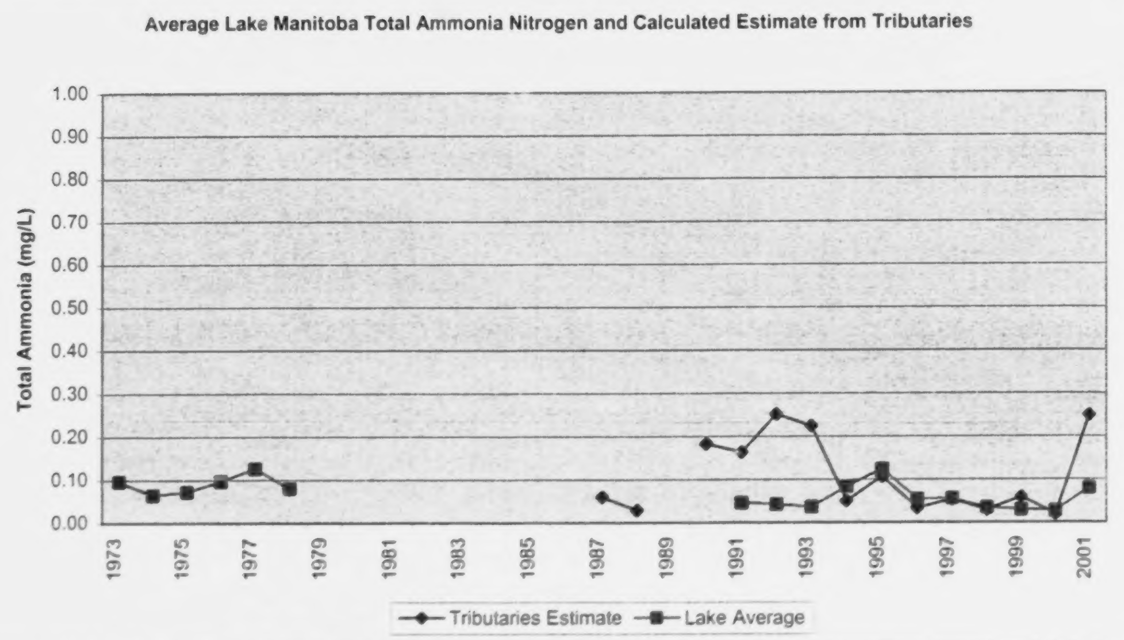


Figure 33. Average annual total ammonia nitrogen in Lake Manitoba compared to estimated input from tributaries.

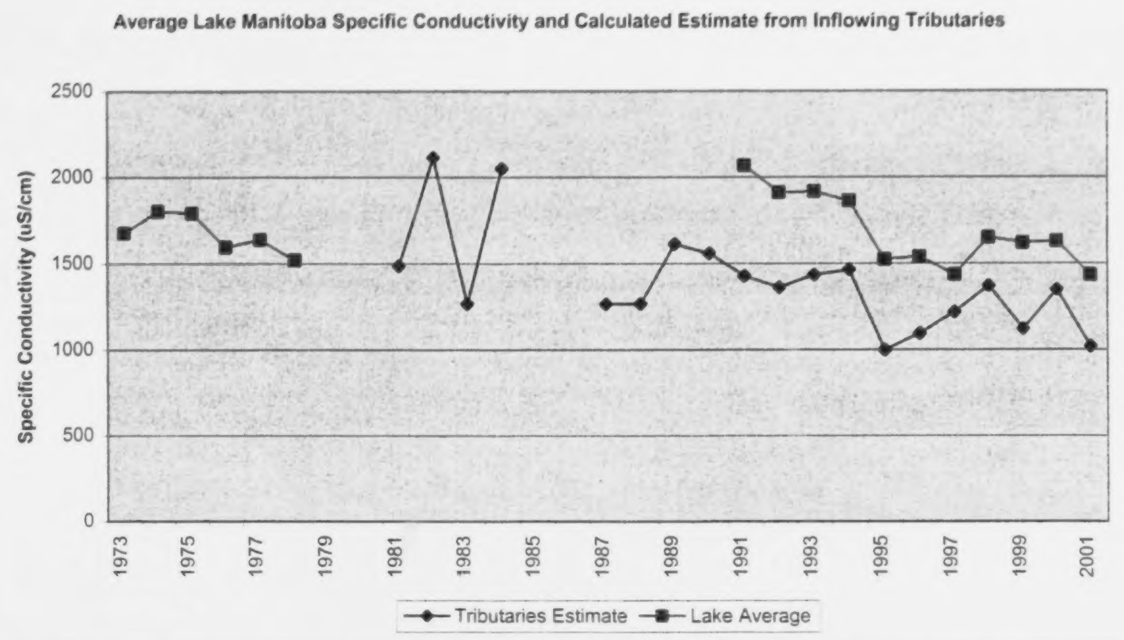


Figure 34. Average annual specific conductivity in Lake Manitoba compared to estimated input from tributaries.

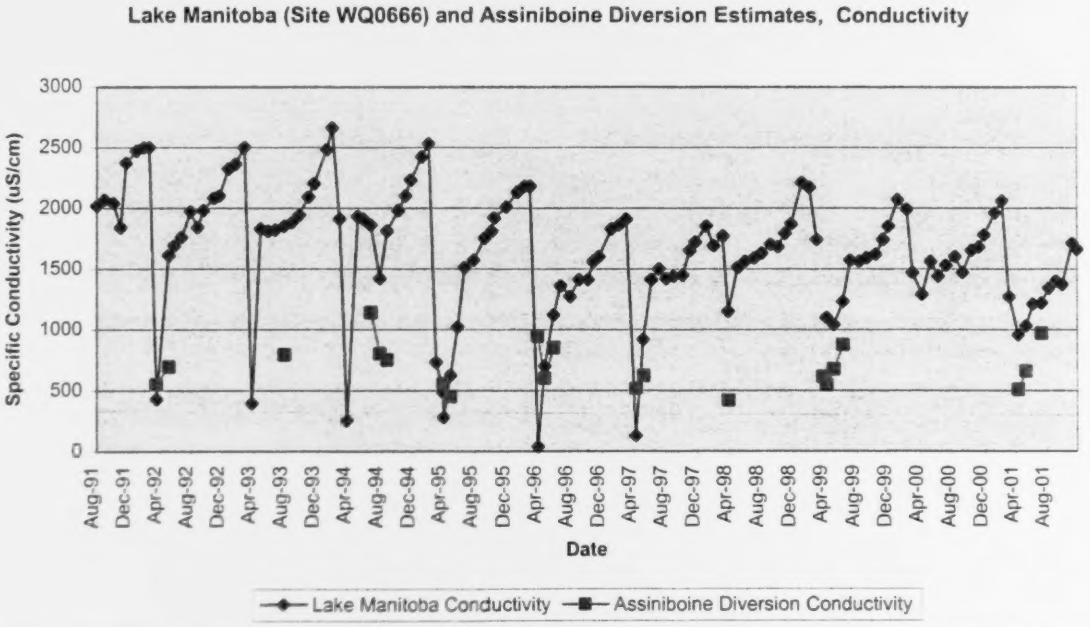


Figure 35. Lake Manitoba Site WQ0666 and Assiniboine River site WQ0014 specific conductivity, 1991 through 2001.

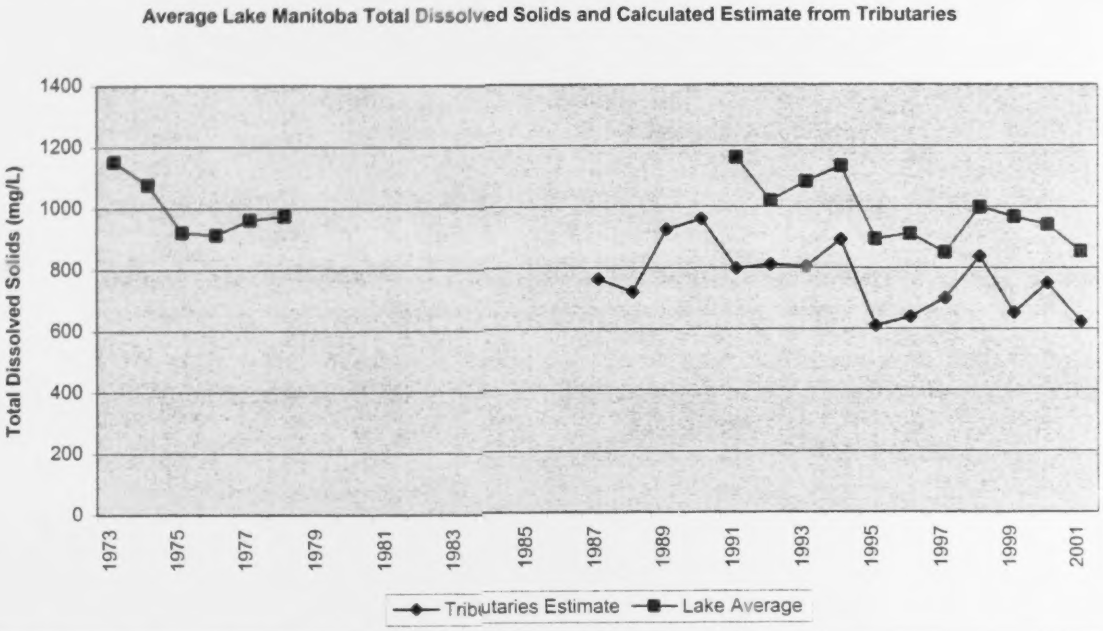


Figure 36. Average annual total dissolved solids in Lake Manitoba compared to estimated input from tributaries.

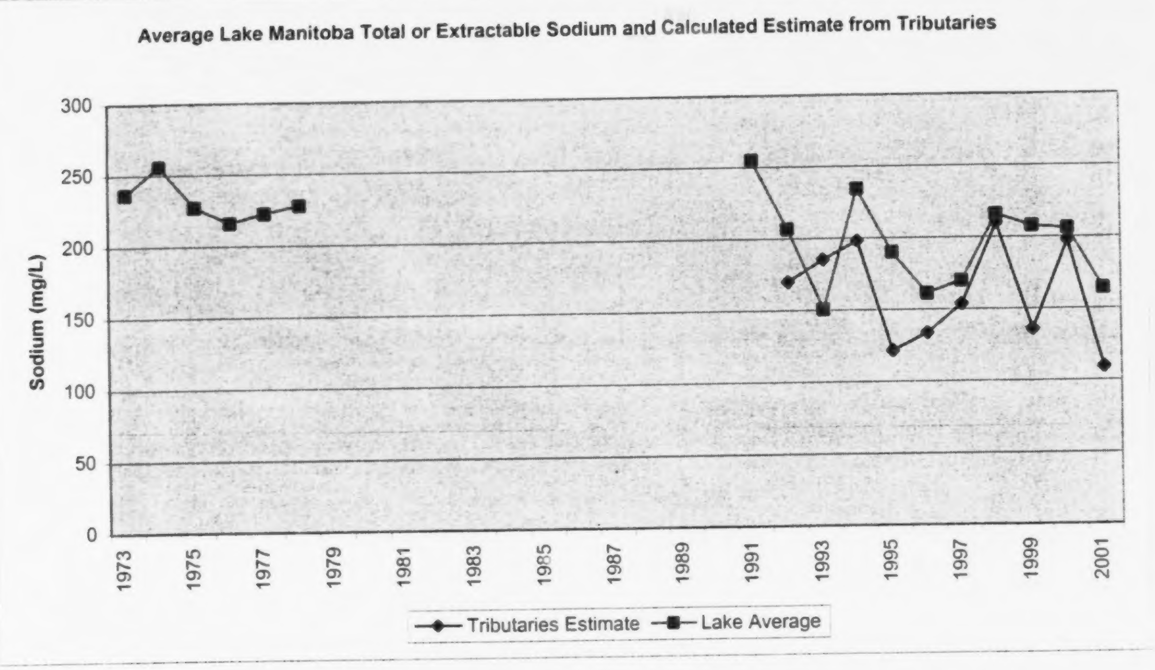


Figure 37. Average annual total or extractable sodium in Lake Manitoba compared to estimated input from tributaries.

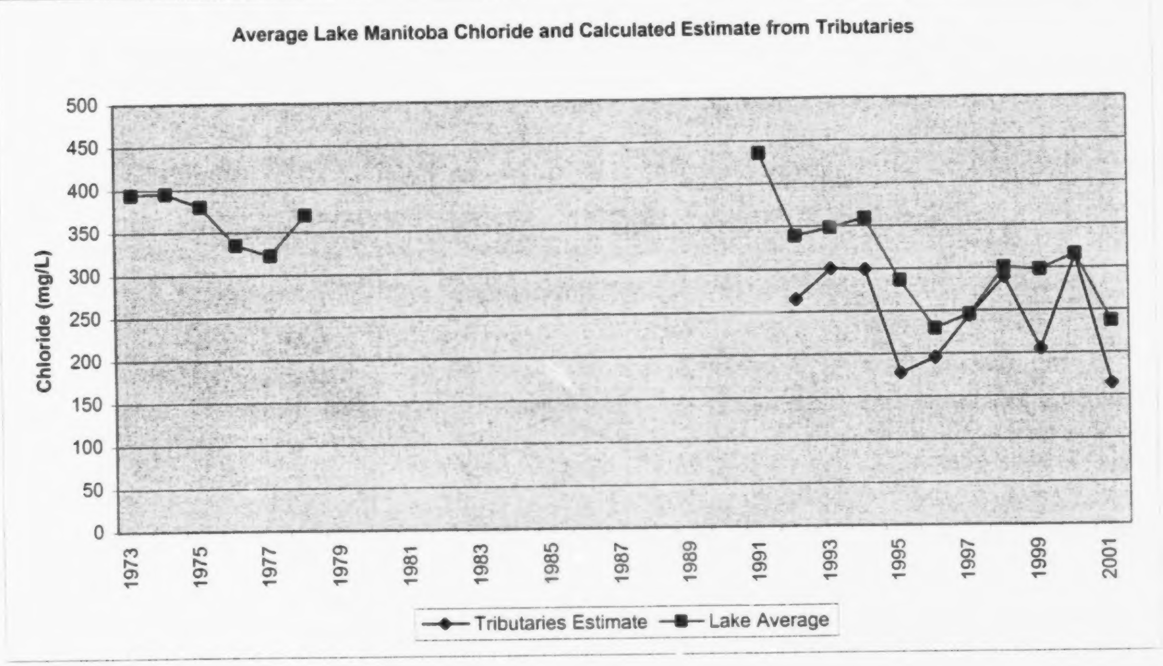


Figure 38. Average annual chloride in Lake Manitoba compared to estimated input from tributaries.

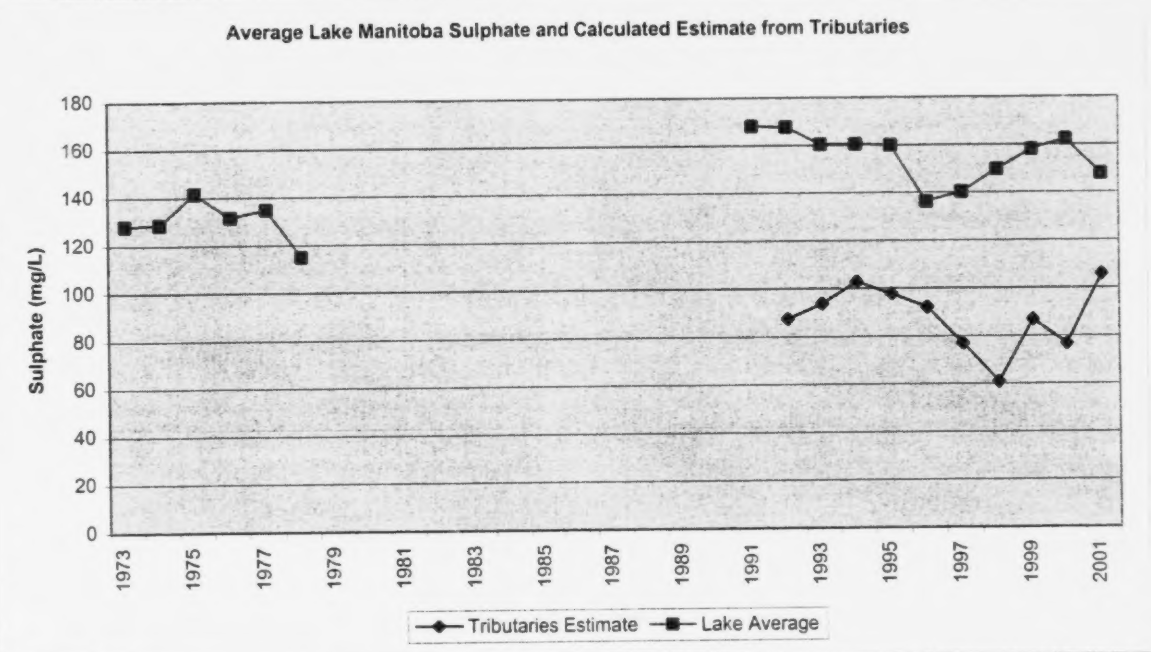


Figure 39. Average annual sulphate in Lake Manitoba compared to estimated input from tributaries.

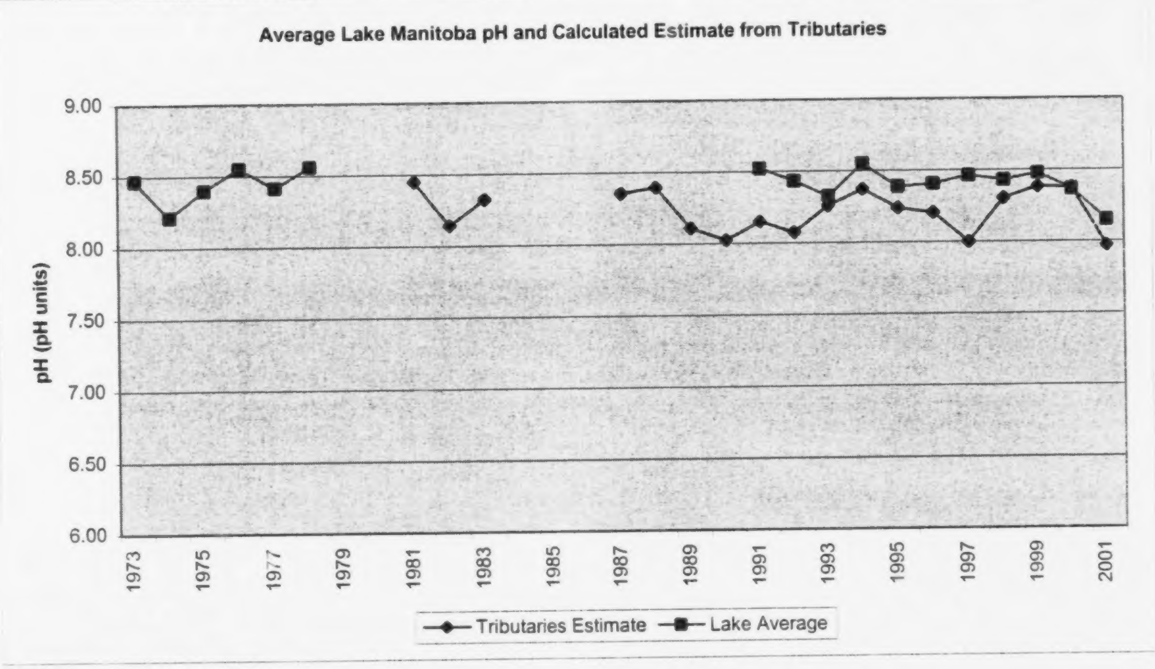


Figure 40. Average annual pH in Lake Manitoba compared to estimated input from tributaries.

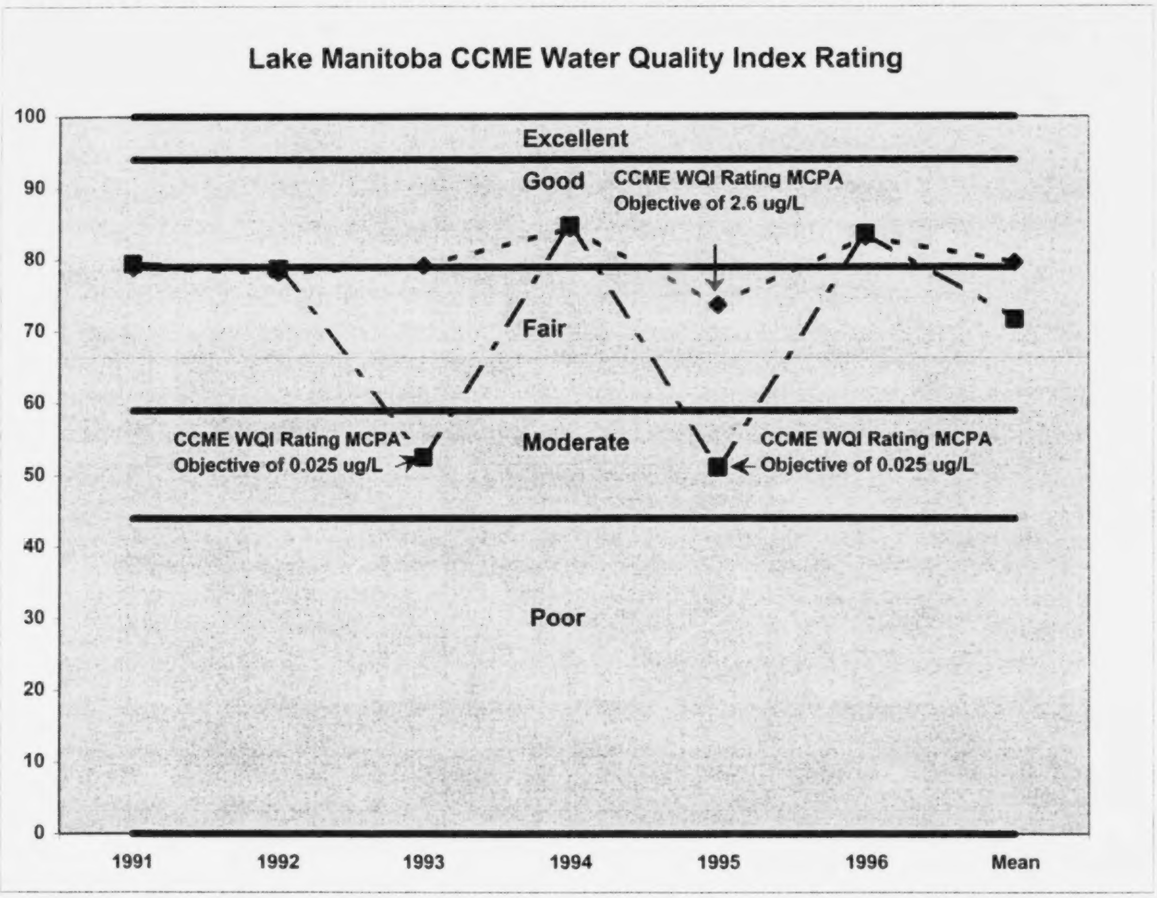


Figure 41. CCME water quality index ratings for each year from 1991 through 1996 and averages for all six years for Lake Manitoba.

Tables 1 through 8.

Table 1. Comparative water chemistry in Lake Manitoba from the 1950s through the 1991 to 2001 time period.

Location	Statistic	Secchi Disc	Temperature	Total Coliform (MPN)	Fecal Coliform (MPN)	Total Coliform (MF)	Fecal Coliform (MF)	*Escherichia coli* (MF)	Specific Conductivity
	Units	m	Degrees C	Bacteria/100 mL	Bacteria/100 mL	Bacteria/100 mL	Bacteria/100 mL	Bacteria/100 mL	uS/cm
Lake Manitoba South Basin 1953-1954	Average								2084.2500
Lake Manitoba South Basin 1953-1954	Standard Deviation								254.1990
Lake Manitoba South Basin 1953-1954	N								12
L. Manitoba South Basin1953-1954 and 1966-1969	Student's t Test								-3.5584
L. Manitoba South Basin1953-1954 and 1966-1969	t Test for Log Data								
L. Manitoba South Basin1953-1954 and 1966-1969	Pooled df								38
L. Manitoba South Basin1953-1954 and 1966-1969	Significance @ P = 0.05								Increase
Lake Manitoba North Basin 1966-1969	Average								2092.9630
Lake Manitoba North Basin 1966-1969	Standard Deviation								336.2098
Lake Manitoba North Basin 1966-1969	N								27
L. Manitoba North and South Basins 1966-1969	Student's t Test								-3.9825
L. Manitoba North and South Basins 1966-1969	t Test for Log Data								
L. Manitoba North and South Basins 1966-1969	Pooled df								53
L. Manitoba North and South Basins 1966-1969	Significance @ P = 0.05								Increase
Lake Manitoba South Basin 1966-1969	Average								2431.7745
Lake Manitoba South Basin 1966-1969	Standard Deviation								293.9948
Lake Manitoba South Basin 1966-1969	N								28
L. Manitoba South Basin in 1966-1969 and 1973-1977	Student's t Test								6.2669
L. Manitoba South Basin in 1966-1969 and 1973-1977	t Test for Log Data								
L. Manitoba South Basin in 1966-1969 and 1973-1977	Pooled df								65
L. Manitoba South Basin in 1966-1969 and 1973-1977	Significance @ P = 0.05								Decrease
Lake Manitoba North Basin 1973-1977	Average		12.3977	2.5957	0.1818				1496.0213
Lake Manitoba North Basin 1973-1977	Standard Deviation		8.5355	7.7562	0.8428				245.4468
Lake Manitoba North Basin 1973-1977	N		44	47	44				47
L. Manitoba North and South Basins 1973-1977	Student's t Test		0.3263						-6.6554
L. Manitoba North and South Basins 1973-1977	t Test for Log Data			-1.5808	-2.4814				
L. Manitoba North and South Basins 1973-1977	Pooled df		78	84	80				84
L. Manitoba North and South Basins 1973-1977	Significance @ P = 0.05		No	No	Increase				Increase
Lake Manitoba South Basin 1973-1977	Average		11.7639	4.7436	2.1316				1923.8205
Lake Manitoba South Basin 1973-1977	Standard Deviation		8.7737	9.2983	5.6720				348.9130
Lake Manitoba South Basin 1973-1977	N		36	39	38				39
L. Manitoba South Basin 1973-1977 and 1991-2001	Student's t Test		2.3767						3.0619[a]
L. Manitoba South Basin 1973-1977 and 1991-2001	t Test for Log Data			-1.1365	-1.0267				
L. Manitoba South Basin 1973-1977 and 1991-2001	Pooled df		118	54	38				162
L. Manitoba South Basin 1973-1977 and 1991-2001	Significance @ P = 0.05		Decrease	No	No				Decrease*
Lake Manitoba near Delta Marsh Field Station 1991-2001	Average	0.5984	7.6982	6.8824	2.5000	10.0000	10.2564	11.0000	1660.3040
Lake Manitoba near Delta Marsh Field Station 1991-2001	Standard Deviation	0.4518	8.5074	13.8514	2.1213	0.0000	2.2646	4.4721	500.3363
Lake Manitoba near Delta Marsh Field Station 1991-2001	N	83	84	17	2	2	78	20	125
	Note		Not All Temperatures Available						* No Change t = 1.1504 df = 135 Delta Area Only

a. Outlier value for conductivity of 39 uS/cm from April 1996 removed from calculations

Table 1. (Continued).

Location	Statistic	Total Solids	Total Dissolved Solids	Total Suspended Solids	Turbidity	True Colour	pH	Total Alkalinity	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
	Units	mg/L	mg/L	mg/L	NTU	Colour Units	pH Units	mg/L	mg/L	mg/L	mg/L
Lake Manitoba South Basin 1953-1954	Average		1293.5714	29.8167	23.8462	16.9231	8.4385		291.4615	5.7538	
Lake Manitoba South Basin 1953-1954	Standard Deviation		194.2257	24.9082	22.1617	25.5391	0.1446		43.4312	6.0252	
Lake Manitoba South Basin 1953-1954	N		7	6	13	13	13		13	13	
L. Manitoba South Basin1953-1954 and 1966-1969	Student's t Test		-2.3902				2.5013		1.4617	-2.8187	
L. Manitoba South Basin1953-1954 and 1966-1969	t Test for Log Data										
L. Manitoba South Basin1953-1954 and 1966-1969	Pooled df		34				38		40	40	
L. Manitoba South Basin1953-1954 and 1966-1969	Significance @ P = 0.05		Increase				Decrease		No	Increase	
Lake Manitoba North Basin 1966-1969	Average		1268.0714				8.1131	192.3929	220.8214	7.8946	
Lake Manitoba North Basin 1966-1969	Standard Deviation		195.7599				0.2226	29.4808	40.3933	8.1613	
Lake Manitoba North Basin 1966-1969	N		28				26	28	28	28	
L. Manitoba North and South Basins 1966-1969	Student's t Test		-4.2582				-2.9049	-7.2210	-4.6303	-2.7636	
L. Manitoba North and South Basins 1966-1969	t Test for Log Data										
L. Manitoba North and South Basins 1966-1969	Pooled df		55				51	55	55	55	
L. Manitoba North and South Basins 1966-1969	Significance @ P = 0.05		Increase				Increase	Increase	Increase	Increase	
Lake Manitoba South Basin 1966-1969	Average		1485.7968				8.2822	247.0560	270.9779	15.0745	
Lake Manitoba South Basin 1966-1969	Standard Deviation		190.2718				0.2010	27.6674	41.3518	11.1648	
Lake Manitoba South Basin 1966-1969	N		29				27	29	29	29	
L. Manitoba South Basin in 1966-1969 and 1973-1977	Student's t Test		6.6131				-4.1873	2.3008	1.2446	1.9929	
L. Manitoba South Basin in 1966-1969 and 1973-1977	t Test for Log Data										
L. Manitoba South Basin in 1966-1969 and 1973-1977	Pooled df		63				64	66	66	66	
L. Manitoba South Basin in 1966-1969 and 1973-1977	Significance @ P = 0.05		Decrease				Increase	Decrease	No	No	
Lake Manitoba North Basin 1973-1977	Average	875.0500	869.1136	11.5909	6.0420	6.7955	8.3536	168.6383	196.0000	4.8128	0.0000
Lake Manitoba North Basin 1973-1977	Standard Deviation	176.6015	169.7758	6.9293	6.1995	7.4102	0.2373	30.6824	41.0080	4.9926	0.0000
Lake Manitoba North Basin 1973-1977	N	40	44	44	44	44	47	47	47	47	47
L. Manitoba North and South Basins 1973-1977	Student's t Test	-5.5477	-5.6861	-2.9351	-1.9010	1.0735	-3.0317	-8.3121	-5.6872	-3.8231	0.0000
L. Manitoba North and South Basins 1973-1977	t Test for Log Data			Log Normal	Log Normal	Log Normal					
L. Manitoba North and South Basins 1973-1977	Pooled df	71	78	78	80	80	84	84	84	84	84
L. Manitoba North and South Basins 1973-1977	Significance @ P = 0.05	Increase	Increase	Increase	No	No	Increase	Increase	Increase	Increase	No
Lake Manitoba South Basin 1973-1977	Average	1139.1515	1127.6667	27.6111	10.6447	5.5526	8.5044	228.5385	255.6154	10.3677	0.0000
Lake Manitoba South Basin 1973-1977	Standard Deviation	230.0294	236.2719	35.3669	14.9896	2.4128	0.2191	36.1553	56.0482	8.3242	0.0000
Lake Manitoba South Basin 1973-1977	N	33	36	36	38	38	39	39	39	39	39
L. Manitoba South Basin 1973-1977 and 1991-2001	Student's t Test	1.9980[a]	2.8972[a]	-0.3901	-4.0084	-5.5405	2.0880	0.1320	-0.0184	-4.5406	-9.8982
L. Manitoba South Basin 1973-1977 and 1991-2001	t Test for Log Data			Log Normal	Log Normal	Log Normal					
L. Manitoba South Basin 1973-1977 and 1991-2001	Pooled df	123	157	159	162	162	163	162	163	159	154
L. Manitoba South Basin 1973-1977 and 1991-2001	Significance @ P = 0.05	Decrease*	Decrease*	No	Increase*	Increase*	Decrease*	No	No	Increase	Increase
Lake Manitoba near Delta Marsh Field Station 1991-2001	Average	1017.3043	969.4797	29.0720	25.0644	12.5000	8.3946	227.2680	255.8495	16.7408	7.1504
Lake Manitoba near Delta Marsh Field Station 1991-2001	Standard Deviation	321.6782	301.3674	34.5231	30.6709	13.7949	0.3045	56.5211	73.1428	7.3988	4.5016
Lake Manitoba near Delta Marsh Field Station 1991-2001	N	92	123	125	126	126	126	125	126	122	117
	Note	* No Change t = 0.3749 df = 100 Delta Area Only	* No Change t = 0.9591 df = 132 Delta Area Only		* Increase t = -2.2647 df = 136 Delta Area Only	* Increase t = -2.9722 df = 136 Delta Area Only	* No Change t = 0.4435 df = 136 Delta Area Only			Detection Limit Change	Detection Limit Change

a. Outlier value for total and total dissolved solids of 32 mg/L from April 1996 removed from calculations.

Table 1. (Continued).

Location	Statistic Units	Calcium Extractable mg/L	Calcium Total mg/L	Magnesium Extractable mg/L	Magnesium Total mg/L	Hardness ($CaCO_3$) mg/L	Manganese Extractable mg/L	Manganese Total mg/L	Iron Extractable mg/L	Iron Total mg/L	Potassium Extractable mg/L	Potassium Total mg/L
Lake Manitoba South Basin 1953-1954	Average	37.0615		73.0462		393.1538			0.0457		19.9462	
Lake Manitoba South Basin 1953-1954	Standard Deviation	6.0993		11.5940		57.2711			0.0288		5.1813	
Lake Manitoba South Basin 1953-1954	N	13		13		13			7		13	
L. Manitoba South Basin1953-1954 and 1966-1969	Student's t Test	-5.6886		-2.4692		-3.3626						
L. Manitoba South Basin1953-1954 and 1966-1969	t Test for Log Data											
L. Manitoba South Basin1953-1954 and 1966-1969	Pooled df	40		40		40						
L. Manitoba South Basin1953-1954 and 1966-1969	Significance @ P = 0.05	Increase		Increase		Increase						
Lake Manitoba North Basin 1966-1969	Average	52.6304		60.0304		379.9464			0.0600			
Lake Manitoba North Basin 1966-1969	Standard Deviation	9.2653		14.3227		67.0249						
Lake Manitoba North Basin 1966-1969	N	28		28		28			1			
L. Manitoba North and South Basins 1966-1969	Student's t Test	1.3380		-6.4436		-4.7759						
L. Manitoba North and South Basins 1966-1969	t Test for Log Data											
L. Manitoba North and South Basins 1966-1969	Pooled df	55		55		55						
L. Manitoba North and South Basins 1966-1969	Significance @ P = 0.05	No		Increase		Increase						
Lake Manitoba South Basin 1966-1969	Average	49.7405		83.5948		462.9164			0.0800			
Lake Manitoba South Basin 1966-1969	Standard Deviation	6.9106		13.2823		64.1368						
Lake Manitoba South Basin 1966-1969	N	29		29		29			1			
L. Manitoba South Basin in 1966-1969 and 1973-1977	Student's t Test	2.3566		5.2918		5.1430						
L. Manitoba South Basin in 1966-1969 and 1973-1977	t Test for Log Data											
L. Manitoba South Basin in 1966-1969 and 1973-1977	Pooled df	60		65		65						
L. Manitoba South Basin in 1966-1969 and 1973-1977	Significance @ P = 0.05	No		Decrease		Decrease						
Lake Manitoba North Basin 1973-1977	Average	49.3238		37.5932		274.3617	High		0.0500		13.4175	
Lake Manitoba North Basin 1973-1977	Standard Deviation	9.0412		9.0372		48.6113	< Values		0.0000		2.7891	
Lake Manitoba North Basin 1973-1977	N	37		44		47			5		40	
L. Manitoba North and South Basins 1973-1977	Student's t Test	2.1128		-12.4261		-9.4364	NA		-1.4785		-9.7318	
L. Manitoba North and South Basins 1973-1977	t Test for Log Data								Log Normal			
L. Manitoba North and South Basins 1973-1977	Pooled df	68		80		83			16		72	
L. Manitoba North and South Basins 1973-1977	Significance @ P = 0.05	Decrease		Increase		Increase			No*		Increase	
Lake Manitoba South Basin 1973-1977	Average	44.4970		66.9737		384.9211	0.0289		0.1723		20.9471	
Lake Manitoba South Basin 1973-1977	Standard Deviation	10.0744		12.3107		59.4340	0.0136		0.2247		3.8484	
Lake Manitoba South Basin 1973-1977	N	33		38		38	9		13		34	
L. Manitoba South Basin 1973-1977 and 1991-2001	Student's t Test	2.1161		3.7919		3.1436	-0.2719		-0.7856		4.8358	
L. Manitoba South Basin 1973-1977 and 1991-2001	t Test for Log Data						Log Normal		Log Normal			
L. Manitoba South Basin 1973-1977 and 1991-2001	Pooled df	60		65		56	36		40		63	
L. Manitoba South Basin 1973-1977 and 1991-2001	Significance @ P = 0.05	Decrease*		Decrease*		Decrease	No		No		Decrease*	
Lake Manitoba near Delta Marsh Field Station 1991-2001	Average	38.0886	43.5474	49.8748	55.9474	303.3400	0.0352	0.0306	0.2814	0.5711	14.7932	16.4444
Lake Manitoba near Delta Marsh Field Station 1991-2001	Standard Deviation	13.6879	6.8029	24.0031	12.8437	138.3168	0.0358	0.0194	0.4749	0.4535	6.2332	3.8792
Lake Manitoba near Delta Marsh Field Station 1991-2001	N	29	19	29	19	20	29	19	29	19	31	18
	Note	*No Change t = 1.6690 df = 76 Extractable & Total Ca Delta Area Only		*Decrease t = 3.8028 df = 81 Extractable & Total Mg Delta Area Only					Extractable iron significantly lower than total iron analyses. * Type II Error?		*Decrease t = 2.2442 df = 54 Extractable & Total K Delta Area Only	

Table 1. (Continued).

Location	Statistic	Sodium Extractable	Sodium Total	Chloride	Sulphate	Boron Extractable	Boron Soluble	Dissolved Oxygen	Total Carbon	Total Organic Carbon	Total Inorganic Carbon	Total Kjeldahl Nitrogen
	Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Lake Manitoba South Basin 1953-1954	Average	305.9231		450.8462	184.1538	0.2175						
Lake Manitoba South Basin 1953-1954	Standard Deviation	51.6179		70.6362	26.7950	0.0465						
Lake Manitoba South Basin 1953-1954	N	13		13	13	4						
L. Manitoba South Basin1953-1954 and 1966-1969	Student's t Test	-3.3769		-2.7652	-1.8956	-1.1372						
L. Manitoba South Basin1953-1954 and 1966-1969	t Test for Log Data											
L. Manitoba South Basin1953-1954 and 1966-1969	Pooled df	40		40	40	14						
L. Manitoba South Basin1953-1954 and 1966-1969	Significance @ P = 0.05	Increase		Increase	No	No						
Lake Manitoba North Basin 1966-1969	Average	304.6250		478.7679	161.8125	0.1600						
Lake Manitoba North Basin 1966-1969	Standard Deviation	43.3903		70.2293	38.3444	0.1213						
Lake Manitoba North Basin 1966-1969	N	28		28	28	11						
L. Manitoba North and South Basins 1966-1969	Student's t Test	-4.5573		-2.0786	-4.4649	-2.5472						
L. Manitoba North and South Basins 1966-1969	t Test for Log Data											
L. Manitoba North and South Basins 1966-1969	Pooled df	55		55	55	21						
L. Manitoba North and South Basins 1966-1969	Significance @ P = 0.05	Increase		Increase	Increase	Increase						
Lake Manitoba South Basin 1966-1969	Average	353.5224		518.7414	203.1819	0.2803						
Lake Manitoba South Basin 1966-1969	Standard Deviation	37.4952		74.7827	31.3757	0.1051						
Lake Manitoba South Basin 1966-1969	N	29		29	29	12						
L. Manitoba South Basin in 1966-1969 and 1973-1977	Student's t Test	7.3510		11.3872	16.5053							
L. Manitoba South Basin in 1966-1969 and 1973-1977	t Test for Log Data											
L. Manitoba South Basin in 1966-1969 and 1973-1977	Pooled df	66		74	74							
L. Manitoba South Basin in 1966-1969 and 1973-1977	Significance @ P = 0.05	Decrease		Decrease	Decrease							
Lake Manitoba North Basin 1973-1977	Average	201.9787		327.4468	99.3830			9.0588		18.1977	37.3000	0.9451
Lake Manitoba North Basin 1973-1977	Standard Deviation	44.1994		68.8324	23.2767			1.5539		2.9804	8.4214	0.2138
Lake Manitoba North Basin 1973-1977	N	47		47	47			34		43	40	41
L. Manitoba North and South Basins 1973-1977	Student's t Test	-5.3406		-3.7806	-12.1187			-0.8522		-2.5164	-7.3262	-4.1424
L. Manitoba North and South Basins 1973-1977	t Test for Log Data											Log Normal
L. Manitoba North and South Basins 1973-1977	Pooled df	84		84	84			57		77	72	74
L. Manitoba North and South Basins 1973-1977	Significance @ P = 0.05	Increase		Increase	Increase			No		Increase	Increase	Increase
Lake Manitoba South Basin 1973-1977	Average	261.5128		397.9487	174.4103			9.4240		20.0278	51.6471	1.0943
Lake Manitoba South Basin 1973-1977	Standard Deviation	59.0748		103.1970	33.9114			1.7213		3.4845	8.3644	0.1349
Lake Manitoba South Basin 1973-1977	N	39		39	39			25		36	34	35
L. Manitoba South Basin 1973-1977 and 1991-2001	Student's t Test	3.9267		4.0176	1.7975			-1.6806		8.4514	-0.2750	-0.9118
L. Manitoba South Basin 1973-1977 and 1991-2001	t Test for Log Data											Log Normal
L. Manitoba South Basin 1973-1977 and 1991-2001	Pooled df	66		91	86			148		160	158	157
L. Manitoba South Basin 1973-1977 and 1991-2001	Significance @ P = 0.05	Decrease*		Decrease*	No			No		Decrease	No	No
Lake Manitoba near Delta Marsh Field Station 1991-2001	Average	182.4279	194.8333	298.2778	155.2653	0.1500	0.1976	10.4384	65.7769	13.8040	52.2873	1.2556
Lake Manitoba near Delta Marsh Field Station 1991-2001	Standard Deviation	105.6730	58.4388	127.6507	59.1899	0.0744	0.0824	2.9130	15.4507	4.0046	12.8425	0.6395
Lake Manitoba near Delta Marsh Field Station 1991-2001	N	29	18	54	49	4	17	125	121	126	126	124
	Note	*No Change t = 1.8580 df = 54 Extractable & Total Na Delta Area Only		*No Change t = 1.8633 df = 64 Delta Area Only						Decrease t = 3.5571 d f =135 Delta Area Only		

Table 1. (Continued).

Location	Statistic Units	Nitrate-Nitrite Nitrogen mg/L	Nitrate Nitrogen mg/L	Total Ammonia Nitrogen mg/L	Total Phosphate mg/L	Total Phosphorus mg/L	Total Particulate Phosphorus mg/L	Total Dissolved Phosphorus mg/L	Ortho Phosphorus mg/L	Chlorophyll a ug/L
Lake Manitoba South Basin 1953-1954	Average		1.1923							
Lake Manitoba South Basin 1953-1954	Standard Deviation		1.1265							
Lake Manitoba South Basin 1953-1954	N		13							
L. Manitoba South Basin1953-1954 and 1966-1969	Student's t Test									
L. Manitoba South Basin1953-1954 and 1966-1969	t Test for Log Data									
L. Manitoba South Basin1953-1954 and 1966-1969	Pooled df									
L. Manitoba South Basin1953-1954 and 1966-1969	Significance @ P = 0.05									
Lake Manitoba North Basin 1966-1969	Average				0.0359	0.0141				
Lake Manitoba North Basin 1966-1969	Standard Deviation				0.0234	0.0092				
Lake Manitoba North Basin 1966-1969	N				11	11				
L. Manitoba North and South Basins 1966-1969	Student's t Test				-2.6140	-2.6140				
L. Manitoba North and South Basins 1966-1969	t Test for Log Data				Log Normal	Log Normal				
L. Manitoba North and South Basins 1966-1969	Pooled df				21	21				
L. Manitoba North and South Basins 1966-1969	Significance @ P = 0.05				Increase	Increase				
Lake Manitoba South Basin 1966-1969	Average				0.0735	0.0288				
Lake Manitoba South Basin 1966-1969	Standard Deviation				0.0638	0.0250				
Lake Manitoba South Basin 1966-1969	N				12	12				
L. Manitoba South Basin in 1966-1969 and 1973-1977	Student's t Test					-1.3441				
L. Manitoba South Basin in 1966-1969 and 1973-1977	t Test for Log Data									
L. Manitoba South Basin in 1966-1969 and 1973-1977	Pooled df					49				
L. Manitoba South Basin in 1966-1969 and 1973-1977	Significance @ P = 0.05					No				
Lake Manitoba North Basin 1973-1977	Average	0.1113		0.0789		0.0248			0.0189	
Lake Manitoba North Basin 1973-1977	Standard Deviation	0.1616		0.0760		0.0105			0.0044	
Lake Manitoba North Basin 1973-1977	N	47		44		47			37	
L. Manitoba North and South Basins 1973-1977	Student's t Test	-0.7268		0.6166		-4.0580			-1.9020	
L. Manitoba North and South Basins 1973-1977	t Test for Log Data	Log Normal		Log Normal		Log Normal				
L. Manitoba North and South Basins 1973-1977	Pooled df	84		78		84			68	
L. Manitoba North and South Basins 1973-1977	Significance @ P = 0.05	No		No		Increase			No	
Lake Manitoba South Basin 1973-1977	Average	0.1310		0.0747		0.0424			0.0215	
Lake Manitoba South Basin 1973-1977	Standard Deviation	0.1994		0.0904		0.0321			0.0066	
Lake Manitoba South Basin 1973-1977	N	39		36		39			33	
L. Manitoba South Basin 1973-1977 and 1991-2001	Student's t Test	2.9401		1.9180		-3.3790				
L. Manitoba South Basin 1973-1977 and 1991-2001	t Test for Log Data	Log Normal		Log Normal		Log Normal				
L. Manitoba South Basin 1973-1977 and 1991-2001	Pooled df	160		160		163				
L. Manitoba South Basin 1973-1977 and 1991-2001	Significance @ P = 0.05	Decrease		No		Increase*				
Lake Manitoba near Delta Marsh Field Station 1991-2001	Average	0.0996		0.0590		0.0650	0.0433	0.0234		8.4186
Lake Manitoba near Delta Marsh Field Station 1991-2001	Standard Deviation	0.2568		0.1060		0.0541	0.0336	0.0222		9.8755
Lake Manitoba near Delta Marsh Field Station 1991-2001	N	126		126		126	70	72		118
	Note					*No Change t =-1.5062 d.f. = 136 Delta Area Only				

Table 1. (Continued).

Location	Statistic Units	Arsenic Extractable mg/L	Arsenic Total mg/L	Cadmium Extractable mg/L	Copper Extractable mg/L	Lead Extractable mg/L	Nickel Extractable mg/L	Zinc Extractable mg/L	Chromium Hexavalent mg/L	Aluminum Extractable mg/L	2, 4,5-T ug/L
Lake Manitoba South Basin 1953-1954	Average										
Lake Manitoba South Basin 1953-1954	Standard Deviation										
Lake Manitoba South Basin 1953-1954	N										
L. Manitoba South Basin1953-1954 and 1966-1969	Student's t Test										
L. Manitoba South Basin1953-1954 and 1966-1969	t Test for Log Data										
L. Manitoba South Basin1953-1954 and 1966-1969	Pooled df										
L. Manitoba South Basin1953-1954 and 1966-1969	Significance @ P = 0.05										
Lake Manitoba North Basin 1966-1969	Average										
Lake Manitoba North Basin 1966-1969	Standard Deviation										
Lake Manitoba North Basin 1966-1969	N										
L. Manitoba North and South Basins 1966-1969	Student's t Test										
L. Manitoba North and South Basins 1966-1969	t Test for Log Data										
L. Manitoba North and South Basins 1966-1969	Pooled df										
L. Manitoba North and South Basins 1966-1969	Significance @ P = 0.05										
Lake Manitoba South Basin 1966-1969	Average										
Lake Manitoba South Basin 1966-1969	Standard Deviation										
Lake Manitoba South Basin 1966-1969	N										
L. Manitoba South Basin in 1966-1969 and 1973-1977	Student's t Test										
L. Manitoba South Basin in 1966-1969 and 1973-1977	t Test for Log Data										
L. Manitoba South Basin in 1966-1969 and 1973-1977	Pooled df										
L. Manitoba South Basin in 1966-1969 and 1973-1977	Significance @ P = 0.05										
Lake Manitoba North Basin 1973-1977	Average			< 0.013	0.0100	0.0170	0.0200	0.0138			
Lake Manitoba North Basin 1973-1977	Standard Deviation			0.0058	0.0000	0.0048	0.0000	0.0052			
Lake Manitoba North Basin 1973-1977	N			3	10	10	2	8			
L. Manitoba North and South Basins 1973-1977	Student's t Test			2.0696	0.0000	0.8219		-1.4054			
L. Manitoba North and South Basins 1973-1977	t Test for Log Data										
L. Manitoba North and South Basins 1973-1977	Pooled df			12	23	22		14			
L. Manitoba North and South Basins 1973-1977	Significance @ P = 0.05			No	No	No		No			
Lake Manitoba South Basin 1973-1977	Average	ot Detectable		< 0.0068	0.0100	0.0150	0.0300	0.0400			
Lake Manitoba South Basin 1973-1977	Standard Deviation			0.0046	0.0000	0.0065		0.0526			
Lake Manitoba South Basin 1973-1977	N	7		11	15	14	1	8			
L. Manitoba South Basin 1973-1977 and 1991-2001	Student's t Test			5.8559	-0.8628	9.2291		2.5786			
L. Manitoba South Basin 1973-1977 and 1991-2001	t Test for Log Data										
L. Manitoba South Basin 1973-1977 and 1991-2001	Pooled df			31	33	33		26			
L. Manitoba South Basin 1973-1977 and 1991-2001	Significance @ P = 0.05			Decrease*	No	Decrease*		Decrease			
Lake Manitoba near Delta Marsh Field Station 1991-2001	Average		0.0028	0.0011	0.0115	0.0020	0.0053	0.0105	0.0200	0.2782	> Detection
Lake Manitoba near Delta Marsh Field Station 1991-2001	Standard Deviation		0.0009	0.0004	0.0067	0.0000	0.0010	0.0022	0.0000	0.2246	
Lake Manitoba near Delta Marsh Field Station 1991-2001	N	0	20	22	20	21	21	20	20	21	9
	Note			* Detection Limit Change Only 2 detections in all samples.	Used Detection Limit of < 0.0100	*Decrease t = 3.5496 with adjusted Detection Limit Delta Area Only					

Table 1. (Continued).

Location	Statistic	2,4,5-TP (Silvex)	2,4-D	2,4-DB	Alachlor	Aldrin	Atrazine	Azinphos Methyl	Bromacil	Bromoxynil	Carbofuran
	Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Lake Manitoba South Basin 1953-1954	Average										
Lake Manitoba South Basin 1953-1954	Standard Deviation										
Lake Manitoba South Basin 1953-1954	N										
L. Manitoba South Basin1953-1954 and 1966-1969	Student's t Test										
L. Manitoba South Basin1953-1954 and 1966-1969	t Test for Log Data										
L. Manitoba South Basin1953-1954 and 1966-1969	Pooled df										
L. Manitoba South Basin1953-1954 and 1966-1969	Significance @ P = 0.05										
Lake Manitoba North Basin 1966-1969	Average										
Lake Manitoba North Basin 1966-1969	Standard Deviation										
Lake Manitoba North Basin 1966-1969	N										
L. Manitoba North and South Basins 1966-1969	Student's t Test										
L. Manitoba North and South Basins 1966-1969	t Test for Log Data										
L. Manitoba North and South Basins 1966-1969	Pooled df										
L. Manitoba North and South Basins 1966-1969	Significance @ P = 0.05										
Lake Manitoba South Basin 1966-1969	Average										
Lake Manitoba South Basin 1966-1969	Standard Deviation										
Lake Manitoba South Basin 1966-1969	N										
L. Manitoba South Basin in 1966-1969 and 1973-1977	Student's t Test										
L. Manitoba South Basin in 1966-1969 and 1973-1977	t Test for Log Data										
L. Manitoba South Basin in 1966-1969 and 1973-1977	Pooled df										
L. Manitoba South Basin in 1966-1969 and 1973-1977	Significance @ P = 0.05										
Lake Manitoba North Basin 1973-1977	Average										
Lake Manitoba North Basin 1973-1977	Standard Deviation										
Lake Manitoba North Basin 1973-1977	N										
L. Manitoba North and South Basins 1973-1977	Student's t Test										
L. Manitoba North and South Basins 1973-1977	t Test for Log Data										
L. Manitoba North and South Basins 1973-1977	Pooled df										
L. Manitoba North and South Basins 1973-1977	Significance @ P = 0.05										
Lake Manitoba South Basin 1973-1977	Average										
Lake Manitoba South Basin 1973-1977	Standard Deviation										
Lake Manitoba South Basin 1973-1977	N										
L. Manitoba South Basin 1973-1977 and 1991-2001	Student's t Test										
L. Manitoba South Basin 1973-1977 and 1991-2001	t Test for Log Data										
L. Manitoba South Basin 1973-1977 and 1991-2001	Pooled df										
L. Manitoba South Basin 1973-1977 and 1991-2001	Significance @ P = 0.05										
Lake Manitoba near Delta Marsh Field Station 1991-2001	Average	> Detection	0.0605	> Detection	> Detection	> Detection	> Detection	> Detection	> Detection	> Detection	> Detection
Lake Manitoba near Delta Marsh Field Station 1991-2001	Standard Deviation		0.0322								
Lake Manitoba near Delta Marsh Field Station 1991-2001	N	9	19	18	18	10	19	7	19	19	18
	Note		3 Detections > Objectives								

Table 1. (Continued).

Location	Statistic	Chlordane (Cis)	Chlordane (Trans)	Chlorothalonil	DDD	DDE	DDT	Deltamethrin	Diazinon	Dicamba	Diclofop-methyl
	Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Lake Manitoba South Basin 1953-1954	Average										
Lake Manitoba South Basin 1953-1954	Standard Deviation										
Lake Manitoba South Basin 1953-1954	N										
L. Manitoba South Basin1953-1954 and 1966-1969	Student's t Test										
L. Manitoba South Basin1953-1954 and 1966-1969	t Test for Log Data										
L. Manitoba South Basin1953-1954 and 1966-1969	Pooled df										
L. Manitoba South Basin1953-1954 and 1966-1969	Significance @ P = 0.05										
Lake Manitoba North Basin 1966-1969	Average										
Lake Manitoba North Basin 1966-1969	Standard Deviation										
Lake Manitoba North Basin 1966-1969	N										
L. Manitoba North and South Basins 1966-1969	Student's t Test										
L. Manitoba North and South Basins 1966-1969	t Test for Log Data										
L. Manitoba North and South Basins 1966-1969	Pooled df										
L. Manitoba North and South Basins 1966-1969	Significance @ P = 0.05										
Lake Manitoba South Basin 1966-1969	Average										
Lake Manitoba South Basin 1966-1969	Standard Deviation										
Lake Manitoba South Basin 1966-1969	N										
L. Manitoba South Basin in 1966-1969 and 1973-1977	Student's t Test										
L. Manitoba South Basin in 1966-1969 and 1973-1977	t Test for Log Data										
L. Manitoba South Basin in 1966-1969 and 1973-1977	Pooled df										
L. Manitoba South Basin in 1966-1969 and 1973-1977	Significance @ P = 0.05										
Lake Manitoba North Basin 1973-1977	Average										
Lake Manitoba North Basin 1973-1977	Standard Deviation										
Lake Manitoba North Basin 1973-1977	N										
L. Manitoba North and South Basins 1973-1977	Student's t Test										
L. Manitoba North and South Basins 1973-1977	t Test for Log Data										
L. Manitoba North and South Basins 1973-1977	Pooled df										
L. Manitoba North and South Basins 1973-1977	Significance @ P = 0.05										
Lake Manitoba South Basin 1973-1977	Average										
Lake Manitoba South Basin 1973-1977	Standard Deviation										
Lake Manitoba South Basin 1973-1977	N										
L. Manitoba South Basin 1973-1977 and 1991-2001	Student's t Test										
L. Manitoba South Basin 1973-1977 and 1991-2001	t Test for Log Data										
L. Manitoba South Basin 1973-1977 and 1991-2001	Pooled df										
L. Manitoba South Basin 1973-1977 and 1991-2001	Significance @ P = 0.05										
Lake Manitoba near Delta Marsh Field Station 1991-2001	Average	> Detection	> Detection	> Detection	> Detection	> Detection	> Detection	> Detection	> Detection	0.0200	> Detection
Lake Manitoba near Delta Marsh Field Station 1991-2001	Standard Deviation									0.0000	
Lake Manitoba near Delta Marsh Field Station 1991-2001	N	18	18	1	10	10	10	3	7	19	19
	Note									1 Detection > Objectives	

Table 1. (Continued).

Location	Statistic	Dichloroprop (2,4-DP)	Dieldrin	Dimethoate	Dinoseb	Dursban (Chlorpyrophos-ethyl)	Endosulfan I	Endrin	Eptam	Ethifluralin	HCH (Alpha)
	Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Lake Manitoba South Basin 1953-1954	Average										
Lake Manitoba South Basin 1953-1954	Standard Deviation										
Lake Manitoba South Basin 1953-1954	N										
L. Manitoba South Basin1953-1954 and 1966-1969	Student's t Test										
L. Manitoba South Basin1953-1954 and 1966-1969	t Test for Log Data										
L. Manitoba South Basin1953-1954 and 1966-1969	Pooled df										
L. Manitoba South Basin1953-1954 and 1966-1969	Significance @ P = 0.05										
Lake Manitoba North Basin 1966-1969	Average										
Lake Manitoba North Basin 1966-1969	Standard Deviation										
Lake Manitoba North Basin 1966-1969	N										
L. Manitoba North and South Basins 1966-1969	Student's t Test										
L. Manitoba North and South Basins 1966-1969	t Test for Log Data										
L. Manitoba North and South Basins 1966-1969	Pooled df										
L. Manitoba North and South Basins 1966-1969	Significance @ P = 0.05										
Lake Manitoba South Basin 1966-1969	Average										
Lake Manitoba South Basin 1966-1969	Standard Deviation										
Lake Manitoba South Basin 1966-1969	N										
L. Manitoba South Basin in 1966-1969 and 1973-1977	Student's t Test										
L. Manitoba South Basin in 1966-1969 and 1973-1977	t Test for Log Data										
L. Manitoba South Basin in 1966-1969 and 1973-1977	Pooled df										
L. Manitoba South Basin in 1966-1969 and 1973-1977	Significance @ P = 0.05										
Lake Manitoba North Basin 1973-1977	Average										
Lake Manitoba North Basin 1973-1977	Standard Deviation										
Lake Manitoba North Basin 1973-1977	N										
L. Manitoba North and South Basins 1973-1977	Student's t Test										
L. Manitoba North and South Basins 1973-1977	t Test for Log Data										
L. Manitoba North and South Basins 1973-1977	Pooled df										
L. Manitoba North and South Basins 1973-1977	Significance @ P = 0.05										
Lake Manitoba South Basin 1973-1977	Average										
Lake Manitoba South Basin 1973-1977	Standard Deviation										
Lake Manitoba South Basin 1973-1977	N										
L. Manitoba South Basin 1973-1977 and 1991-2001	Student's t Test										
L. Manitoba South Basin 1973-1977 and 1991-2001	t Test for Log Data										
L. Manitoba South Basin 1973-1977 and 1991-2001	Pooled df										
L. Manitoba South Basin 1973-1977 and 1991-2001	Significance @ P = 0.05										
Lake Manitoba near Delta Marsh Field Station 1991-2001	Average	> Detection	> Detection	> Detection	> Detection	> Detection	> Detection	> Detection	> Detection	> Detection	> Detection
Lake Manitoba near Delta Marsh Field Station 1991-2001	Standard Deviation										
Lake Manitoba near Delta Marsh Field Station 1991-2001	N	19	10	15	10	15	10	10	1	3	10
	Note										

Table 1. (Continued).

Location	Statistic Units	HCH (Beta) ug/L	HCH (Delta) ug/L	HCH (Gamma (Lindane) ug/L	Heptachlor ug/L	Heptachlor Epoxide ug/L	Malathion ug/L	MCPA ug/L	Methxychlor ug/L	Metribuzin ug/L	Mirex ug/L	Parathion Ethyl ug/L
Lake Manitoba South Basin 1953-1954	Average											
Lake Manitoba South Basin 1953-1954	Standard Deviation											
Lake Manitoba South Basin 1953-1954	N											
L. Manitoba South Basin1953-1954 and 1966-1969	Student's t Test											
L. Manitoba South Basin1953-1954 and 1966-1969	t Test for Log Data											
L. Manitoba South Basin1953-1954 and 1966-1969	Pooled df											
L. Manitoba South Basin1953-1954 and 1966-1969	Significance @ P = 0.05											
Lake Manitoba North Basin 1966-1969	Average											
Lake Manitoba North Basin 1966-1969	Standard Deviation											
Lake Manitoba North Basin 1966-1969	N											
L. Manitoba North and South Basins 1966-1969	Student's t Test											
L. Manitoba North and South Basins 1966-1969	t Test for Log Data											
L. Manitoba North and South Basins 1966-1969	Pooled df											
L. Manitoba North and South Basins 1966-1969	Significance @ P = 0.05											
Lake Manitoba South Basin 1966-1969	Average											
Lake Manitoba South Basin 1966-1969	Standard Deviation											
Lake Manitoba South Basin 1966-1969	N											
L. Manitoba South Basin in 1966-1969 and 1973-1977	Student's t Test											
L. Manitoba South Basin in 1966-1969 and 1973-1977	t Test for Log Data											
L. Manitoba South Basin in 1966-1969 and 1973-1977	Pooled df											
L. Manitoba South Basin in 1966-1969 and 1973-1977	Significance @ P = 0.05											
Lake Manitoba North Basin 1973-1977	Average											
Lake Manitoba North Basin 1973-1977	Standard Deviation											
Lake Manitoba North Basin 1973-1977	N											
L. Manitoba North and South Basins 1973-1977	Student's t Test											
L. Manitoba North and South Basins 1973-1977	t Test for Log Data											
L. Manitoba North and South Basins 1973-1977	Pooled df											
L. Manitoba North and South Basins 1973-1977	Significance @ P = 0.05											
Lake Manitoba South Basin 1973-1977	Average											
Lake Manitoba South Basin 1973-1977	Standard Deviation											
Lake Manitoba South Basin 1973-1977	N											
L. Manitoba South Basin 1973-1977 and 1991-2001	Student's t Test											
L. Manitoba South Basin 1973-1977 and 1991-2001	t Test for Log Data											
L. Manitoba South Basin 1973-1977 and 1991-2001	Pooled df											
L. Manitoba South Basin 1973-1977 and 1991-2001	Significance @ P = 0.05											
Lake Manitoba near Delta Marsh Field Station 1991-2001	Average	> Detection	> Detection	> Detection	> Detection	> Detection	> Detection	11.3158	> Detection	> Detection	> Detection	> Detection
Lake Manitoba near Delta Marsh Field Station 1991-2001	Standard Deviation							3.1632				
Lake Manitoba near Delta Marsh Field Station 1991-2001	N	10	10	19	10	10	15	19	18	19	10	7
	Note							2 Detections > Objectives 12 & 13 ug/L				

Table 1. (Continued).

Location	Statistic	Parathion Methyl	Picloram	Propanil	Propachlor	Propoxur	Simazine	Terbufos	Triallate	Triclopyr	Trifluralin
	Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Lake Manitoba South Basin 1953-1954	Average										
Lake Manitoba South Basin 1953-1954	Standard Deviation										
Lake Manitoba South Basin 1953-1954	N										
L. Manitoba South Basin1953-1954 and 1966-1969	Student's t Test										
L. Manitoba South Basin1953-1954 and 1966-1969	t Test for Log Data										
L. Manitoba South Basin1953-1954 and 1966-1969	Pooled df										
L. Manitoba South Basin1953-1954 and 1966-1969	Significance @ P = 0.05										
Lake Manitoba North Basin 1966-1969	Average										
Lake Manitoba North Basin 1966-1969	Standard Deviation										
Lake Manitoba North Basin 1966-1969	N										
L. Manitoba North and South Basins 1966-1969	Student's t Test										
L. Manitoba North and South Basins 1966-1969	t Test for Log Data										
L. Manitoba North and South Basins 1966-1969	Pooled df										
L. Manitoba North and South Basins 1966-1969	Significance @ P = 0.05										
Lake Manitoba South Basin 1966-1969	Average										
Lake Manitoba South Basin 1966-1969	Standard Deviation										
Lake Manitoba South Basin 1966-1969	N										
L. Manitoba South Basin in 1966-1969 and 1973-1977	Student's t Test										
L. Manitoba South Basin in 1966-1969 and 1973-1977	t Test for Log Data										
L. Manitoba South Basin in 1966-1969 and 1973-1977	Pooled df										
L. Manitoba South Basin in 1966-1969 and 1973-1977	Significance @ P = 0.05										
Lake Manitoba North Basin 1973-1977	Average										
Lake Manitoba North Basin 1973-1977	Standard Deviation										
Lake Manitoba North Basin 1973-1977	N										
L. Manitoba North and South Basins 1973-1977	Student's t Test										
L. Manitoba North and South Basins 1973-1977	t Test for Log Data										
L. Manitoba North and South Basins 1973-1977	Pooled df										
L. Manitoba North and South Basins 1973-1977	Significance @ P = 0.05										
Lake Manitoba South Basin 1973-1977	Average										
Lake Manitoba South Basin 1973-1977	Standard Deviation										
Lake Manitoba South Basin 1973-1977	N										
L. Manitoba South Basin 1973-1977 and 1991-2001	Student's t Test										
L. Manitoba South Basin 1973-1977 and 1991-2001	t Test for Log Data										
L. Manitoba South Basin 1973-1977 and 1991-2001	Pooled df										
L. Manitoba South Basin 1973-1977 and 1991-2001	Significance @ P = 0.05										
Lake Manitoba near Delta Marsh Field Station 1991-2001	Average	> Detection	> Detection	> Detection	> Detection	> Detection	> Detection	> Detection	> Detection	> Detection	> Detection
Lake Manitoba near Delta Marsh Field Station 1991-2001	Standard Deviation										
Lake Manitoba near Delta Marsh Field Station 1991-2001	N	7	19	19	11	18	19	15	19	18	19
	Note										

Table 2. Bacteria* at various sites in Lake Manitoba (1973 through 1977 and 1991 through 2001).

Sites North to South	Site	Location and Date Range	Statistic	Total Coliform Bacteria/100 mL	Fecal Coliform Bacteria/100 mL	*Escherichia coli* Bacteria/100 mL
North Basin	WQ0080	L. Manitoba E. of Twin Is. 1973-1977	Geometric Mean	11	10	
North Basin	WQ0080	L. Manitoba E. of Twin Is. 1973-1977	Average	11	10	
North Basin	WQ0080	L. Manitoba E. of Twin Is. 1973-1977	Standard Deviation	3	0	
North Basin	WQ0080	L. Manitoba E. of Twin Is. 1973-1977	N	15	15	No Samples
North Basin	WQ0078	L. Manitoba near Reed Is. 1973-1977	Geometric Mean	10	10	
North Basin	WQ0078	L. Manitoba near Reed Is. 1973-1977	Average	10	10	
North Basin	WQ0078	L. Manitoba near Reed Is. 1973-1977	Standard Deviation	0	0	
North Basin	WQ0078	L. Manitoba near Reed Is. 1973-1977	N	17	17	No Samples
North Basin	WQ0079	L. Manitoba N. of Pt. Asham 1973-1977	Geometric Mean	12	10	
North Basin	WQ0079	L. Manitoba N. of Pt. Asham 1973-1977	Average	13	10	
North Basin	WQ0079	L. Manitoba N. of Pt. Asham 1973-1977	Standard Deviation	9	0	
North Basin	WQ0079	L. Manitoba N. of Pt. Asham 1973-1977	N	15	15	No Samples
South Basin	WQ0077	L. Manitoba E. of Duscharme Is. 1973-1977	Geometric Mean	11	11	
South Basin	WQ0077	L. Manitoba E. of Duscharme Is. 1973-1977	Average	11	11	
South Basin	WQ0077	L. Manitoba E. of Duscharme Is. 1973-1977	Standard Deviation	3	3	
South Basin	WQ0077	L. Manitoba E. of Duscharme Is. 1973-1977	N	16	16	No Samples
South Basin	WQ0076	L. Manitoba near Sandy Bay 1973-1977	Geometric Mean	12	11	
South Basin	WQ0076	L. Manitoba near Sandy Bay 1973-1977	Average	12	11	
South Basin	WQ0076	L. Manitoba near Sandy Bay 1973-1977	Standard Deviation	5	4	
South Basin	WQ0076	L. Manitoba near Sandy Bay 1973-1977	N	11	11	No Samples
South Basin	WQ0075	L. Manitoba near Delta 1973-1977	Geometric Mean	12	10	
South Basin	WQ0075	L. Manitoba near Delta 1973-1977	Average	14	10	
South Basin	WQ0075	L. Manitoba near Delta 1973-1977	Standard Deviation	9	1	
South Basin	WQ0075	L. Manitoba near Delta 1973-1977	N	12	12	No Samples
South Basin	WQ0666	L. Manitoba near Delta Field Station 1991-2001	Geometric Mean	12	10	11
South Basin	WQ0666	L. Manitoba near Delta Field Station 1991-2001	Average	13	10	11
South Basin	WQ0666	L. Manitoba near Delta Field Station 1991-2001	Standard Deviation	10	2	4
South Basin	WQ0666	L. Manitoba near Delta Field Station 1991-2001	N	19	94	20
South Basin	WQ1744	L. Manitoba at St. Ambrose Beach 1997-2000	Geometric Mean		19	15
South Basin	WQ1744	L. Manitoba at St. Ambrose Beach 1997-2000	Average		29	17
South Basin	WQ1744	L. Manitoba at St. Ambrose Beach 1997-2000	Standard Deviation		32	10
South Basin	WQ1744	L. Manitoba at St. Ambrose Beach 1997-2000	N	No Samples	21	5
South Basin	WQ1745	L. Manitoba at Delta Beach 1997-2000	Geometric Mean		47	24
South Basin	WQ1745	L. Manitoba at Delta Beach 1997-2000	Average		102	39
South Basin	WQ1745	L. Manitoba at Delta Beach 1997-2000	Standard Deviation		150	46
South Basin	WQ1745	L. Manitoba at Delta Beach 1997-2000	N	No Samples	36	10
South Basin	WQ1746	L. Manitoba at Lynch's Pt. Beach 1997-2000	Geometric Mean		43	40
South Basin	WQ1746	L. Manitoba at Lynch's Pt. Beach 1997-2000	Average		91	110
South Basin	WQ1746	L. Manitoba at Lynch's Pt. Beach 1997-2000	Standard Deviation		156	180
South Basin	WQ1746	L. Manitoba at Lynch's Pt. Beach 1997-2000	N	No Samples	20	5

* Bacteria as measured at or above < 10 organisms / 100 mL for MF equivalent.

Bacteria counts at all beach sites monitored between 1997 and 2000 were significantly greater than counts at the lake site near Delta Field Station.

Table 3. Secchi disc and Chlorophyll a in Lake Manitoba (1980-1983 and 1991-2001).

Sites North to South	Station	Location and Date Range	Statistic	Secchi Disc m	Chlorophyll a ug/L
South Basin	WQ0597	Lake Manitoba near Twin Lakes Beach 1980-1983	Average	0.70	7.2
South Basin	WQ0597	Lake Manitoba near Twin Lakes Beach 1980-1983	Standard Deviation	0.11	4.2
South Basin	WQ0597	Lake Manitoba near Twin Lakes Beach 1980-1983	N	29	29
Student's t Test	Log Data	L. Manitoba 1980-1983 and L. Manitoba 1991- 2001	t Statistic Log Data	2.9415	1.1801
Pooled df			Pooled df	110	145
Significance @ P = 0.05			Significance @ P = 0.05	Decrease	No
South Basin	WQ0666	Lake Manitoba near Delta Field Station 1991-2001	Average	0.60	8.4
South Basin	WQ0666	Lake Manitoba near Delta Field Station 1991-2001	Standard Deviation	0.45	9.9
South Basin	WQ0666	Lake Manitoba near Delta Field Station 1991-2001	N	83	118

Table 4. Average annual water quality in Lake Manitoba, for years with four or more sets of water samples, from 1953 through 2001.

Lake Manitoba Sites	Yearly Average or Single Date	Temperature Degrees C	Specific Conductivity uS/cm	Total Solids mg/L	Total Dissolved Solids mg/L	Total Suspended Solids mg/L	Turbidity NTU	Secchi Disc Depth m	True Colour Colour Units	pH pH Units	Total Alkalinity mg/L	Bicarbonate Alkalinity mg/L	Carbonate Alkalinity mg/L	Hydroxide Alkalinity mg/L	Calcium Extractable mg/L	Calcium Total mg/L
Bajkov 1930	1928 Average	---	---	---	665.6667	---	---	---	---	---	104.8333	---	---	---	32.9500	---
Thomas (Delta, Oak Pt.)	1953 Average	---	2074.1000	---	1286.0000	39.3000	25.0000	---	19.5455	8.4636	---	289.7273	6.8000	---	37.1182	---
Cober/Crowe Sites	1966 Average	---	2265.4489	---	1378.8440	---	---	---	---	8.1992	220.2039	246.3396	11.5476	---	51.1601	---
Cober/Crowe Sites	1967 Average	---	2275.2009	---	1381.2562	---	---	---	---	8.1992	220.5325	246.8348	11.5020	---	51.1581	---
Cober/Crowe Sites	1968 Average	---	2267.6492	---	1378.1657	---	---	---	---	8.2003	220.2264	246.3438	11.5861	---	50.9103	---
Cober/Crowe Sites	1969 Average	---	2253.6791	---	1371.5848	---	---	---	---	8.1931	218.7390	245.6751	10.8740	---	50.6750	---
Other WQ Sites	1973 Average	20.3000	1674.0000	1275.0000	1152.0000	23.0000	17.5000	---	5.0000	8.4690	166.8000	187.1000	6.5740	0.0000	---	---
Other WQ Sites	1974 Average	10.3929	1802.1429	1083.5714	1077.1429	13.9286	6.2308	---	5.3571	8.2143	181.2143	211.8571	2.6286	0.0000	51.3422	---
Other WQ Sites	1975 Average	6.8462	1792.6316	928.3077	921.5385	10.2308	4.6105	---	7.3158	8.3974	215.1579	240.6316	10.8000	0.0000	46.1842	---
Other WQ Sites	1976 Average	12.1087	1594.0000	937.3043	913.1739	21.2174	6.4283	---	6.1304	8.5500	197.6522	223.5652	8.6609	0.0000	45.1087	---
Other WQ Sites	1977 Average	12.1579	1638.4211	984.1053	962.0526	22.7895	11.4947	---	6.3158	8.4132	202.5263	234.9474	6.0000	0.0000	48.2263	---
Other WQ Sites	1978 Average	22.0000	1520.0000	---	975.0000	25.0000	26.0000	---	5.0000	8.5600	152.0000	166.0000	9.6000	0.0000	---	---
Other WQ Sites	1980 Average	---	---	---	---	---	---	0.6719	---	---	---	---	---	---	---	---
Other WQ Sites	1981 Average	---	---	---	---	---	---	0.7056	---	---	---	---	---	---	---	---
Other WQ Sites	1982 Average	---	---	---	---	---	---	0.6800	---	---	---	---	---	---	---	---
Other WQ Sites	1983 Average	---	---	---	---	---	---	0.6861	---	---	---	---	---	---	---	---
Other WQ Sites	1994 Average	---	1815.0000	1067.5000	1042.5000	12.0000	14.0500	---	5.0000	8.6925	190.0000	184.7500	23.2000	10.2000	39.4000	---
Other WQ Sites	1998-07-02	---	1520.0000	---	---	---	10.0000	---	---	8.8300	---	---	---	---	---	---
Near Delta Field Station	1991 Average	10.7000	2068.0000	1198.0000	1162.0000	35.2000	29.4800	---	10.0000	8.5220	234.8000	249.4000	18.3800	0.0000	38.5000	---
Near Delta Field Station	1992 Average	6.2857	1910.5833	1039.1667	1020.0000	28.4167	24.6000	---	7.0833	8.4333	233.5000	263.3333	10.9092	0.3400	43.3750	---
Near Delta Field Station	1993 Average	4.3500	1916.1667	1101.6667	1082.7273	20.5000	18.3917	0.4929	5.4167	8.3225	248.3000	285.8917	8.5217	0.3400	35.7750	---
Near Delta Field Station[1]	1994 Average	8.0208	1878.7500	1173.3333	1163.3333	17.9167	16.7083	0.6227	7.0833	8.5017	238.8083	262.0867	15.6917	6.0917	32.9700	---
Near Delta Field Station	1995 Average	9.0625	1522.7917	934.1667	894.5833	48.8333	40.9750	0.4592	13.1250	8.3879	214.8167	241.9583	18.6083	10.2000	41.4000	---
Near Delta Field Station[2]	1996 Average	7.2000	1538.0000	929.0909	910.9091	18.6667	16.1517	0.6217	11.2500	8.4067	205.8250	224.7750	18.0583	9.3783	35.3980	---
Near Delta Field Station	1997 Average	6.9667	1436.0833	866.0000	849.9167	19.6667	17.5250	0.6433	11.6667	8.4625	207.4417	233.9167	20.4167	10.0167	38.8000	40.7000
Near Delta Field Station	1998 Average	9.1583	1649.1667	993.3333	999.0909	19.8182	14.2250	0.8064	10.0000	8.4325	223.0000	251.4167	20.0000	10.0000	40.5000	40.8000
Near Delta Field Station	1999 Average	0.0000	1618.3333	1213.3333	966.6667	34.3333	31.5833	0.7414	30.8333	8.4775	237.8333	264.0833	21.0000	10.0000	---	48.7250
Near Delta Field Station	2000 Average	5.7333	1627.5000	---	940.8333	37.7500	39.9250	0.4589	13.7500	8.3683	229.9167	254.3333	20.6667	10.0000	---	42.9250
Near Delta Field Station	2001 Average	0.0000	1432.2500	---	853.9167	26.4167	17.4750	0.4000	13.3333	8.1525	241.0000	289.5000	7.3342	2.8750	---	43.2200
Note		Not all	96%			28%				0.6%						
		Temperatures	> 1000			> 25				> 6.5 or						
		Available	April 1996 outliers removed from conductivity and dissolved solids.							>9.0						

1. Includes data from Other Sites

2. April 1996 outliers removed from conductivity and dissolved solids 1996 averages.

Table 4. (Continued).

Lake Manitoba Sites	Yearly Average or Single Date	Calcium Dissolved mg/L	Magnesium Extractable mg/L	Magnesium Total mg/L	Magnesium Dissolved mg/L	Hardness ($CsCO_3$) mg/L	Manganese Extractable mg/L	Manganese Total mg/L	Manganese Dissolved mg/L	Iron Extractable mg/L	Iron Total mg/L	Iron Dissolved mg/L	Potassium Extractable mg/L	Potassium Total mg/L	Potassium Dissolved mg/L
Bajkov 1930	1928 Average	---	43.8500	---	---	---	---	---	---	0.2000	---	---	---	---	---
Thomas (Delta, Oak Pt.)	1953 Average	---	72.7727	---	---	392.1818	---	---	---	---	---	0.0560	19.7818	---	---
Cober/Crowe Sites	1966 Average	---	72.0193	---	---	422.1592	---	---	---	0.0700	---	---	---	---	---
Cober/Crowe Sites	1967 Average	---	72.2509	---	---	423.1018	---	---	---	0.0700	---	---	---	---	---
Cober/Crowe Sites	1968 Average	---	72.1722	---	---	422.3203	---	---	---	0.0700	---	---	---	---	---
Cober/Crowe Sites	1969 Average	---	71.3103	---	---	418.0746	---	---	---	0.0700	---	---	---	---	---
Other WQ Sites	1973 Average	---	50.0000	---	---	289.7778	0.2500	---	---	0.0550	---	---	16.8000	---	---
Other WQ Sites	1974 Average	---	51.2143	---	---	338.0714	0.0800	---	---	0.0500	---	---	16.0000	---	---
Other WQ Sites	1975 Average	---	53.1579	---	---	330.4737	0.0500	---	---	0.3500	---	---	17.6789	---	---
Other WQ Sites	1976 Average	---	50.0000	---	---	318.3913	0.0250	---	---	0.2100	---	---	16.9696	---	---
Other WQ Sites	1977 Average	---	51.7421	---	---	333.4211	0.0200	---	---	0.0600	---	---	16.3947	---	---
Other WQ Sites	1978 Average	---	39.0000	---	---	244.0000	0.2500	---	---	0.0500	---	---	---	---	---
Other WQ Sites	1980 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1981 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1982 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1983 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1994 Average	---	50.3000	---	---	305.2500	0.0300	---	---	0.1025	---	---	16.3000	---	---
Other WQ Sites	1998-07-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	1991 Average	---	65.5000	---	---	366.0000	0.0400	---	---	0.3900	---	---	17.5000	---	---
Near Delta Field Station	1992 Average	---	54.5000	---	---	332.7500	0.0675	---	---	0.7675	---	---	15.7500	---	---
Near Delta Field Station	1993 Average	---	48.5750	---	---	289.1500	0.0250	---	---	0.1025	---	---	16.5400	---	---
Near Delta Field Station[1]	1994 Average	---	56.6100	---	---	315.3500	0.0200	---	---	0.0875	---	---	15.1200	---	---
Near Delta Field Station	1995 Average	---	50.1000	---	---	309.7500	0.0565	---	---	0.6250	---	---	14.4000	---	---
Near Delta Field Station[2]	1996 Average	---	42.3160	---	---	237.6000	0.0132	---	---	0.0700	---	---	13.2000	---	---
Near Delta Field Station	1997 Average	34.7000	45.1900	49.6000	50.2000	---	0.0408	0.0480	0.0050	0.1780	1.6400	0.0100	13.2580	15.2000	15.2000
Near Delta Field Station	1998 Average	41.0500	52.1000	58.3600	53.0500	---	0.0180	0.0213	0.0060	0.1000	0.3620	0.0100	14.9500	16.9500	15.3000
Near Delta Field Station	1999 Average	---	---	58.5250	---	---	---	0.0389	---	---	0.7125	---	---	18.5500	---
Near Delta Field Station	2000 Average	---	---	58.5750	---	---	---	0.0157	---	---	0.3200	---	---	16.6250	---
Near Delta Field Station	2001 Average	---	---	50.6400	---	---	---	0.0418	---	---	0.6540	---	---	14.4600	---
Note							15.4% Manganese > 0.05 Extractable and Total		15.4%	23% Iron > 0.3 Extractable and Total					

1. Includes data from Other Sites

Table 4. (Continued).

Lake Manitoba Sites	Yearly Average or Single Date	Sodium Extractable mg/L	Sodium Total mg/L	Sodium Dissolved mg/L	Chloride mg/L	Fluoride mg/L	Sulphate mg/L	Boron Extractable mg/L	Boron Soluble mg/L	Dissolved Oxygen mg/L	B.O.D. mg/L	Total Carbon mg/L	Total Organic Carbon mg/L	Total Inorganic Carbon mg/L	Total Kjeldahl Nitrogen mg/L	Total Kjeldahl Nitrogen Dissolved mg/L
Bajkov 1930	1928 Average	---	---	---	194.0000	---	94.1833	---	---	10.2000	---	---	---	---	---	---
Thomas (Delta, Oak Pt.)	1953 Average	306.8182	451.9091	---	---	---	184.5455	0.2175	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1966 Average	329.5026	---	---	499.1053	---	182.8601	0.2228	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1967 Average	329.9165	---	---	499.8389	---	183.0060	0.2228	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1968 Average	329.6245	---	---	498.3693	---	182.9369	0.2228	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1969 Average	327.1714	---	---	495.3346	---	180.6734	0.2199	---	---	---	---	---	---	---	---
Other WQ Sites	1973 Average	236.3000	---	---	394.5000	0.4217	128.0000	---	---	8.3800	1.5900	---	23.2500	24.0000	0.9800	---
Other WQ Sites	1974 Average	255.9286	---	---	395.7143	---	128.6429	---	---	8.3000	1.7889	---	19.1429	36.5556	0.9500	---
Other WQ Sites	1975 Average	227.3684	---	---	380.0000	---	141.6316	---	---	9.2400	0.8632	---	16.6053	49.0789	1.0105	---
Other WQ Sites	1976 Average	216.0870	---	---	335.2174	---	131.5217	---	---	10.3143	0.7435	---	18.4783	44.3696	1.0000	---
Other WQ Sites	1977 Average	222.5263	---	---	322.3684	---	134.7895	---	---	8.7923	1.7263	---	21.1579	45.7895	1.0658	---
Other WQ Sites	1978 Average	228.0000	---	---	370.0000	0.4300	115.0000	---	---	8.0000	1.8000	---	---	---	1.0000	---
Other WQ Sites	1980 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1981 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1982 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1983 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1994 Average	246.7500	---	---	393.5000	---	155.5000	---	---	9.8750	---	---	---	---	1.8450	---
Other WQ Sites	1998-07-02	---	---	---	---	---	---	---	---	11.9000	---	36.0000	10.0000	26.0000	1.3000	---
Near Delta Field Station	1991 Average	255.0000	---	---	436.0000	---	168.0000	---	0.2200	11.2500	---	---	16.4000	57.1000	1.4100	---
Near Delta Field Station	1992 Average	206.5500	---	---	338.8750	---	167.7143	---	0.2000	9.8500	---	71.1250	13.7500	57.3750	1.3408	---
Near Delta Field Station	1993 Average	150.5250	---	---	348.0000	---	160.2500	---	0.1975	10.0667	---	69.6250	14.2500	55.3750	1.2767	---
Near Delta Field Station[1]	1994 Average	222.0000	---	---	324.7500	---	165.2500	---	0.2000	10.6333	---	66.8417	17.6500	49.1917	1.3817	---
Near Delta Field Station	1995 Average	190.0000	---	---	286.8000	---	160.0000	---	0.1833	10.4917	---	63.1583	12.4417	50.7167	1.1929	---
Near Delta Field Station[2]	1996 Average	161.3480	---	---	229.3333	---	136.2500	0.1367	---	9.4167	---	58.8000	11.3500	47.5333	1.0233	0.8143
Near Delta Field Station	1997 Average	160.2740	170.0000	178.0000	246.2000	---	140.2000	---	---	9.6750	---	61.0083	11.9917	49.0167	0.8642	---
Near Delta Field Station	1998 Average	175.5000	215.7500	180.0000	300.6667	---	149.6667	---	---	9.7667	---	64.5000	13.0833	51.4167	1.2083	---
Near Delta Field Station	1999 Average	---	207.7500	---	298.0000	---	158.0000	---	---	11.5583	---	69.4167	14.8333	54.5833	1.8000	---
Near Delta Field Station	2000 Average	---	205.7500	---	315.5000	---	162.2500	---	---	12.7250	---	65.6667	13.5000	52.1667	1.2500	---
Near Delta Field Station	2001 Average	---	164.0000	---	237.2000	---	147.8000	---	---	9.8583	---	70.5000	14.6667	55.8333	0.9833	---
Note										1.6% > 5.0						

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[1] Includes data from Other Sites

Table 4. (Continued).

Lake Manitoba Sites	Yearly Average or Single Date	Total Kjeldahl Nitrogen Particulate mg/L	Nitrate-Nitrite Nitrogen mg/L	Nitrate Nitrogen mg/L	Total Ammonia Nitrogen mg/L	Total Phosphate mg/L	Total Phosphorus mg/L	Total Particulate Phosphorus mg/L	Total Dissolved Phosphorus mg/L	Ortho Phosphorus mg/L	Chlorophyll a ug/L	Silica mg/L	Arsenic Total mg/L	Arsenic Extractable mg/L	Cadmium Extractable or (Total) mg/L
Bajkov 1930	1928 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Thomas (Delta, Oak Pt.)	1953 Average	---	---	1.3182	---	---	---	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1966 Average	---	---	---	---	0.0555	0.0218	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1967 Average	---	---	---	---	0.0555	0.0218	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1968 Average	---	---	---	---	0.0534	0.0210	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1969 Average	---	---	---	---	0.0548	0.0215	---	---	---	---	---	---	---	---
Other WQ Sites	1973 Average	---	0.1550	---	0.0911	---	0.0210	---	---	---		---	---	---	0.0167
Other WQ Sites	1974 Average	---	0.0650	---	0.0400	---	0.0264	---	---	0.0222		---	---	---	0.0100
Other WQ Sites	1975 Average	---	0.1668	---	0.0558	---	0.0389	---	---	0.0226		---	---	0.0400	0.0050
Other WQ Sites	1976 Average	---	0.0739	---	0.0904	---	0.0357	---	---	0.0204		---	---	0.0400	0.0050
Other WQ Sites	1977 Average	---	0.1505	---	0.0926	---	0.0349	---	---	0.0163		---	---	0.0225	0.0050
Other WQ Sites	1978 Average	---	0.1500	---	0.0800	---	0.0200	---	---	---		---	---	---	---
Other WQ Sites	1980 Average	---	---	---	---	---	---	---	---	---	7.99	---	---	---	---
Other WQ Sites	1981 Average	---	---	---	---	---	---	---	---	---	5.92	---	---	---	---
Other WQ Sites	1982 Average	---	---	---	---	---	---	---	---	---	6.31	---	---	---	---
Other WQ Sites	1983 Average	---	---	---	---	---	---	---	---	---	10.37	---	---	---	---
Other WQ Sites	1994 Average	---	0.0425	---	0.0520	---	0.0428	---	0.0115	---	9.20	5.9500	0.0018	---	0.0010
Other WQ Sites	1998-07-02	---	---	---	0.0400	---	---	---	---	---		---	---	---	---
Near Delta Field Station	1991 Average	---	0.0400	---	0.0460	---	0.0540	---	---	---	12.80	---	---	---	0.0010
Near Delta Field Station	1992 Average	---	0.0742	---	0.0431	---	0.0634	---	---	---	11.33	---	0.0033	---	0.0010
Near Delta Field Station	1993 Average	---	0.0733	---	0.0360	---	0.0518	0.0200	0.0317	---	5.81	---	0.0025	---	0.0010
Near Delta Field Station[1]	1994 Average	---	0.2300	---	0.0943	---	0.0471	---	---	---	6.75	---	0.0023	---	0.0014
Near Delta Field Station	1995 Average	---	0.0967	---	0.1242	---	0.0800	---	---	---	10.18	---	0.0034	---	0.0010
Near Delta Field Station[2]	1996 Average	0.2929	0.1033	---	0.0545	---	0.0645	0.0608	0.0224	---	9.06	---	0.0023	---	0.0010
Near Delta Field Station	1997 Average	---	0.1033	---	0.0556	---	0.0539	0.0319	0.0222	---	3.75	---	---	---	---
Near Delta Field Station	1998 Average	---	0.0617	---	0.0342	---	0.0504	0.0341	0.0163	---	4.70	---	---	---	0.0005
Near Delta Field Station	1999 Average	---	0.0558	---	0.0300	---	0.0711	0.0486	0.0225	---	8.00	---	---	---	---
Near Delta Field Station	2000 Average	---	0.0500	---	0.0275	---	0.0611	0.0440	0.0171	---	6.58	---	---	---	---
Near Delta Field Station	2001 Average	---	0.1483	---	0.0800	---	0.0924	0.0496	0.0389	---	14.91	---	---	--	---
Note			All Acceptable		All Acceptable > 10		75% > 0.025						All Arsenic > 0.025 Extractable and Total		7.5% Above Objectives

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1. Includes data from Other Sites

Table 4. (Continued).

Lake Manitoba Sites	Yearly Average or Single Date	Copper Extractable mg/L	Lead Extractable or (Total) mg/L	Nickel Extractable mg/L	Zinc Extractable mg/L	Chromium Hexavalent mg/L	Aluminum Extractable mg/L	2, 4,5-T ug/L	2,4,5-TP ug/L	2,4-D ug/L	2,4-DB (Silvex) ug/L	Alachlor ug/L	Aldrin ug/L	Atrazine ug/L	Azinphos Methyl ug/L
Bajkov 1930	1928 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Thomas (Delta, Oak Pt.)	1953 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1966 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1967 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1968 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1969 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1973 Average	0.0100	0.0200	0.0233	0.0443	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1974 Average	0.0100	0.0171	---	0.0129	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1975 Average	0.0050	0.0100	---	0.0050	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1976 Average	0.0060	0.0100	---	0.0250	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1977 Average	0.0075	0.0100	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1978 Average	0.0100	0.0200	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1980 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1981 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1982 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1983 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1994 Average	0.0100	0.0020	0.0050	0.0100	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1998-07-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	1991 Average	0.0100	0.0020	0.0050	0.0100	0.0200	0.7830	---	---	0.0500	---	---	---	0.5000	---
Near Delta Field Station	1992 Average	0.0100	0.0020	0.0055	0.0100	0.0200	0.3085	0.0100	0.0100	0.0850	0.2000	2.0000	0.0100	0.5000	1.5000
Near Delta Field Station	1993 Average	0.0175	0.0020	0.0052	0.0100	0.0200	0.2356	0.0100	0.0100	0.0525	0.2000	2.0000	0.0100	0.5000	1.5000
Near Delta Field Station[1]	1994 Average	0.0100	0.0020	0.0060	0.0100	0.0200	0.1748	0.0100	0.0100	0.0550	0.2000	2.0000	0.0100	0.5000	1.5000
Near Delta Field Station	1995 Average	0.0100	0.0020	0.0050	0.0125	0.0200	0.3210	---	---	0.0575	0.2000	2.0000	---	0.5000	---
Near Delta Field Station[2]	1996 Average	0.0100	0.0020	0.0050	0.0100	0.0200	0.2217	---	---	0.0500	0.2000	2.0000	---	0.5000	---
Near Delta Field Station	1997 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	1998 Average	---	0.0010	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	1999 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	2000 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	2001 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Note		2.0% Above Objectives	All Below Objectives	All Below Objectives	All Below Objectives			Less Than Detectable	Less Than Detectable	All Below Objectives	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable

1. Includes data from Other Sites

Table 4. (Continued).

Lake Manitoba Sites	Yearly Average or Single Date	Bromacil ug/L	Bromoxynil ug/L	Carbofuran ug/L	Chlordane (Cis) ug/L	Chlordane (Trans) ug/L	Chlorothalonil ug/L	DDD ug/L	DDE ug/L	DDT ug/L	Deltamethrin ug/L	Diazinon ug/L	Dicamba ug/L	Diclofop-methyl ug/L	Dichloroprop (2,4-DP) ug/L	Dieldrin ug/L
Bajkov 1930	1928 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Thomas (Delta, Oak Pt.)	1953 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1966 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1967 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1968 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1969 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1973 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1974 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1975 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1976 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1977 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1978 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1980 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1981 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1982 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1983 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1994 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1998-07-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	1991 Average	1.0000	0.0100	---	---	---	---	---	---	---	---	---	0.0200	0.0900	0.1000	---
Near Delta Field Station	1992 Average	1.0000	0.0100	2.0000	0.0100	0.0100	---	0.0300	0.0100	0.0300	---	0.5000	0.0200	0.0900	0.1000	0.0200
Near Delta Field Station	1993 Average	1.0000	0.0100	2.0000	0.0100	0.0100	---	0.0300	0.0100	0.0300	---	0.5000	0.0200	0.0900	0.1000	0.0200
Near Delta Field Station[1]	1994 Average	1.0000	0.0100	2.0000	0.0100	0.0100	---	0.0300	0.0100	0.0300	---	0.5000	0.0200	0.0900	0.1000	0.0200
Near Delta Field Station	1995 Average	1.0000	0.0100	2.0000	0.0100	0.0100	---	---	---	---	---	---	0.0200	0.0900	0.1000	---
Near Delta Field Station[2]	1996 Average	1.0000	0.0100	2.0000	0.0100	0.0100	5.0000	---	---	---	0.0400	---	0.0200	0.0900	0.1000	---
Near Delta Field Station	1997 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	1998 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	1999 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	2000 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	2001 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Note		Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	5.2% Detectable 1 value 0.02	Less Than Detectable	Less Than Detectable	Less Than Detectable

1. Includes data from Other Sites

Table 4. (Continued).

Lake Manitoba Sites	Yearly Average or Single Date	Dimethoate	Dinoseb	Dursban (Chlorpyrophos-ethyl)	Endosulfan I	Endrin	Eptam	Ethifluralin	HCH (Alpha)	HCH (Beta)	HCH (Delta)	HCH (Gamma) (Lindane)	Heptachlor	Heptachlor Epoxide	Malathion	MCPA
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Bajkov 1930	1928 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Thomas (Delta, Oak Pt.)	1953 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1966 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1967 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1968 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1969 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1973 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1974 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1975 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1976 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1977 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1978 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1980 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1981 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1982 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1983 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1994 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1998-07-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	1991 Average	---	0.0500	---	---	---	---	---	---	---	---	0.0200	---	---	---	10.0000
Near Delta Field Station	1992 Average	1.0000	0.0500	0.8000	0.0100	0.0200	---	---	0.0200	0.0300	0.0100	0.0200	0.0200	0.0100	0.9000	15.0000
Near Delta Field Station	1993 Average	1.0000	0.0500	0.8000	0.0100	0.0200	---	---	0.0200	0.0300	0.0100	0.0200	0.0200	0.0100	0.9000	10.5000
Near Delta Field Station[1]	1994 Average	1.0000	0.0500	0.8000	0.0100	0.0200	---	---	0.0200	0.0300	0.0100	0.0200	0.0200	0.0100	0.9000	10.0000
Near Delta Field Station	1995 Average	1.0000	---	0.8000	---	---	---	---	---	---	---	0.0200	---	---	0.9000	10.7500
Near Delta Field Station[2]	1996 Average	1.0000	---	0.8000	---	---	5.0000	0.0200	---	---	---	0.0200	---	---	0.9000	10.0000
Near Delta Field Station	1997 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	1998 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	1999 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	2000 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	2001 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Note		Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	10.5% Detectable 2 values 12 & 13

[1] Includes data from Other Sites

Table 4. (Continued).

Lake Manitoba Sites	Yearly Average or Single Date	Methxychlor ug/L	Metribuzin ug/L	Mirex ug/L	Parathion Ethyl ug/L	Parathion Methyl ug/L	Picloram ug/L	Propanil ug/L	Propachlor ug/L	Propoxur ug/L	Simazine ug/L	Terbufos ug/L	Triallate ug/L	Triclopyr ug/L	Trifluralin ug/L
Bajkov 1930	1928 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Thomas (Delta, Oak Pt.)	1953 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1966 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1967 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1968 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cober/Crowe Sites	1969 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1973 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1974 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1975 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1976 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1977 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1978 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1980 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1981 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1982 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1983 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1994 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other WQ Sites	1998-07-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	1991 Average	---	1.0000	---	---	---	0.2000	2.0000	2.0000	---	0.5000	---	1.0000	---	0.0300
Near Delta Field Station	1992 Average	0.0400	1.0000	0.0200	0.9000	0.6000	0.2000	2.0000	2.0000	2.0000	0.5000	0.7000	1.0000	0.0200	0.0300
Near Delta Field Station	1993 Average	0.0400	1.0000	0.0200	0.9000	0.6000	0.2000	2.0000	2.0000	2.0000	0.5000	0.7000	1.0000	0.0200	0.0300
Near Delta Field Station[1]	1994 Average	0.0400	1.0000	0.0200	0.9000	0.6000	0.2000	2.0000	2.0000	2.0000	0.5000	0.7000	1.0000	0.0200	0.0300
Near Delta Field Station	1995 Average	0.0400	1.0000	---	---	---	0.2000	2.0000	---	2.0000	0.5000	0.7000	1.0000	0.0200	0.0300
Near Delta Field Station[1]	1996 Average	0.0400	1.0000	---	---	---	0.2000	2.0000	---	2.0000	0.5000	0.7000	1.0000	0.0200	0.0300
Near Delta Field Station	1997 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	1998 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	1999 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	2000 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Near Delta Field Station	2001 Average	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Note		Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable	Less Than Detectable

1. Includes data from Other Sites

Table 5. Variables with objectives based on Williamson (2001) with highlighted objectives used in the CCME Water Quality Index.

Variable	Units	Unlisted or Explanation	Drinking Water (D)	Recreation (R)	Aquatic Life (A)	Irrigation (I)	Greenhouse (GI)	Field Crop (FI)	Livestock (L)	Other
Bacteria										
Fecal Coliform	Bacteria/100 mL		Treat to 0	200						
E-Coli	Bacteria/100 mL		Treat to 0	200						
Temperature	°C		15 Aesthetic		Calculated					
pH	pH Units		Treat to 6.5-8.5	5.0-9.0	6.5-9.0					
Specific Conductivity	uS/cm		700				1000	1500	4300	
Solids										
Total Dissolved	mg/L		500 Aesthetic				700	1000	3000	
Total Suspended	mg/L				5 for background < 25 (30 day average) 25 for background < 250 (1 day average)					
Turbidity	NTU		5 Aesthetic & treat to 1							
Transpanency										
Secchi Disc	m	Unlisted								
True Colour	Colour Units		15 Aesthetic							
Alkalinity										
Total Alkalinity	mg/L									
Bicarbonate	mg/L	Unlisted								
Carbonate	mg/L	Unlisted								
Hydroxide	mg/L	Unlisted								
Oxygen	mg/L									
Dissolved Oxygen	mg/L	Cool water aquatic life 3 to 6 dependant on duration & temperature			5 instantaneous minimum for early life stages					
Oxygen Saturation	%				0.47%					
BOD	mg/L	Listed for effluent but not ambient waters								
Nitrogen										
Total Ammonia	mg/L				Calculated					
Nitrate-Nitrite	mg/L		10						100	
Kjeldahal Nitrogen	mg/L	Unlisted								
Phosphorus										
Total P	mg/L	Objective under review. Promotes nuisance algae or rooted plant growth								0.05 in rivers & 0.025 in lakes Aesthetic (Williamson 1988)
Particulate P	mg/L	Unlisted								
Dissolved P	mg/L	Unlisted								
Chlorophyll a	ug/L	Unlisted								
Carbon										
Total C	mg/L	Unlisted								
Total Inorganic C	mg/L	Unlisted								
Total Organic C	mg/L	Unlisted								
Chloride	mg/L		250 Aesthetic				100	700		
Sulphate	mg/L		500 Aesthetic						1000	
Hardness	mg/L		200 Aesthetic (Williamson 1988)							
Calcium	mg/L								1000	
Magnesium	mg/L	Unlisted								
Potassium	mg/L	Unlisted								
Sodium	mg/L		200 Aesthetic							
Sodium Adsorbtion Ratio	SAR						4	6		
Trace Elements										
Aluminum	mg/L				0.1 > 6.5 pH , 0.005 < 6.5 pH	5.0			0.5	
Arsenic	mg/L	Aquatic life 4 day & 1 hr	0.025		0.15 & 0.34		0.1		0.25	
Antimony	mg/L		0.006							
Barium	mg/L		1000							
Beryllium	mg/L	Unlisted								
Bismuth	mg/L	Unlisted								
Boron	mg/L		5.0				0.5	6.0	5.0	

Table 5. (Continued).

Variable	Units	Unlisted or Explanation	Drinking Water (D)	Recreation (R)	Aquatic Life (A)	Irrigation (I)	Greenhouse (GI)	Field Crop (FI)	Livestock (L)	Other
Cadmium	mg/L		0.005		Calculated	0.0051			0.08	
Chromium	mg/L		0.05							
Hexavalent Chromium	mg/L				0.011 & 0.016	0.008			0.05	
Cobalt	mg/L					0.05			0.1	
Copper	mg/L	Aquatic life disssolved	1.0 Aesthetic		Calculated		0.02	0.1	0.5-5.0	
Cesium	mg/L	Available for radio isotopes only								
Iron	mg/L		0.3 Aesthetic		0.3	5.0				
Lead	mg/L		0.01		Calculated	0.2				
Lithium	mg/L					2.5				
Manganese	mg/L		0.05 Aesthetic			0.2				
Molybdenum	mg/L				0.073		0.01	0.05	0.5	
Nickel	mg/L				Calculated	200			1000	
Rubidium	mg/L	Unlisted								
Selenium	mg/L		0.01		0.001		0.02	0.05	0.05	
Silver	mg/L		0.0001							
Strontium	mg/L	Available for radio isotopes only								
Telurium	mg/L	Unlisted								
Thallium	mg/L		0.0008							
Tin	mg/L	Unlisted								
Titanium	mg/L	Unlisted								
Tungsten	mg/L	Unlisted								
Uranium	mg/L		0.1			0.01			0.2	
Vanadium	mg/L	Unlisted				0.1			0.1	
Zinc	mg/L		5.0 Aesthetic		Calculated		1.0	5.0	5.0	
Zirconium	mg/L	Available for radio isotopes only								
Pesticides										
2, 4-D	ug/L		100		4				100	
2, 4-DB	ug/L		100		4				100	
2, 4-DP	ug/L		100		4				100	
2, 4, 5-T	ug/L				4				100	
2, 4, 5-TP	ug/L				4				100	
Alachlor	ug/L	Unlisted								
Aldrin	ug/L		0.7							
Atrazine	ug/L		5		1.8	10			5	
Azinphos-Methyl	ug/L		20							
Bromacil	ug/L		5			0.2			1100	
Bromoxynil	ug/L		5		5	0.33			11	
Carbofuran	ug/L		90		1.8				45	
Cis-Chlordane	ug/L	Sediment concentrations only								
Trans-Chlordane	ug/L	Sediment concentrations only								
Chlorpyrifos-ethyl	ug/L		90		0.0035				24	
Chlorothalonil	ug/L				0.18	5.8			170	
DDD p,p	ug/L	Sediment concentrations only								
DDE p,p	ug/L	Sediment concentrations only								
DDT p,p	ug/L	Sediment concentrations only								
Deltamethrin	ug/L				0.004				2.5	
Diazinon	ug/L		2.5							
Dicamba	ug/L		120		10	0.006			122	
Diclofop	ug/L	See Diclofop-Methyl								
Diclofop-Methyl	ug/L		9		6.1	0.18			9	
Dieldrin	ug/L		0.7							
Dimethoate	ug/L		20		6.2				3	
Dinoseb	ug/L		10		0.05	16			150	

Table 5. (Continued).

Variable	Units	Unlisted or Explanation	Drinking Water (D)	Recreation (R)	Aquatic Life (A)	Irrigation (I)	Greenhouse (GI)	Field Crop (FI)	Livestock (L)	Other
Endosulfan I	ug/L				0.02					
Endrin	ug/L	Sediment concentrations only								
Eptam	ug/L	Unlisted								
Ethfluralin	ug/L	Unlisted								
Fenoxaprop	ug/L				4				100	
Glyphosate	ug/L		280		65				280	
(HCH Alpha)	ug/L	Sediment concentrations only								
HCH Beta	ug/L	Sediment concentrations only								
HCH Delta	ug/L	Sediment concentrations only								
Lindane (HCH Gamma)	ug/L	Sediment concentrations only			0.08 (Williamson 1988)					
Heptachlor	ug/L	Sediment concentrations only								
Heptaclor-Epoxide	ug/L	Sediment concentrations only								
Imazethabenz	ug/L	Unlisted								
Malathion	ug/L		190							
MCPA	ug/L				2.6	0.025			25	
Mecoprop	ug/L				4				100	
Methxychlor p.p	ug/L		900							
Metribuzin	ug/L		80		1.0	0.5			80	
Metsulfuron-Methyl	ug/L	Unlisted								
Mirex	ug/L	Unlisted								
Parathion-Ethyl	ug/L	for Total Parathion	50							
Parathion-Methyl	ug/L	for Total Parathion	50							
Pentachlorophenol	ug/L		30 Aesthetic, 60 Health		0.5					
Picloram	ug/L		190		29				190	
Propachlor	ug/L	Unlisted								
Propanil	ug/L	Unlisted								
Propoxur	ug/L	Unlisted								
Quizlofop	ug/L				4				100	
Simazine	ug/L		10		0.5	10			10	
Terbufos	ug/L		1							
Tifensulfuron	ug/L	Unlisted								
Triallate	ug/L				0.24				230	
Tribenuron	ug/L	Unlisted								
Triclopyr	ug/L	Unlisted								
Trifluralin	ug/L		45		0.2				45	
Other										
Total Phenols	mg/L				0.004				0.002	

Table 6. Average annual water quality in three tributaries and one river flowing out of Lake Manitoba, 1971 through 2001.

Site	Average for Year of	Description of Average	Location	Assiniboine Diversion Periods of Discharge[1]	Annual Discharge[1] of Water m^3/sec	Contribution of Inflowing Rivers %	Temperature Degrees C	Total Coliform Bacteria (MPN) Bacteria/100 mL
Assiniboine Diversion est [1]								
WQ0014	1971	1971 Average during Diversion Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	April 9 to 22, 1971	---	---	---	4300.0000
WQ0014	1972	1972 Average during Diversion Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	March 24 to May 5, 1972	304678933	9%	---	632.3765
WQ0014	1973	1973 No Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	No Discharge in 1973	0	0%		
WQ0014	1974	1974 Average during Diversion Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	April 16 to June 6 and July 11 and 12, 1974	657808107	18%	14.2500	633.2361
WQ0014	1975	1975 Average during Diversion Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	April 21 to June 30, 1975	514850171	12%	---	2300.0000
WQ0014	1976	1976 Average during Diversion Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	April 1 to June 6 , 1976	1752118556	32%	10.0000	2300.0000
WQ0014	1977	1977 No Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	No Discharge in 1977	0	0%		
WQ0391	1978	1978 Average during Diversion Discharge	Assiniboine R. at PR 240, S. of Portage la Prairie	April 10 to 12, 1978	4210618	0%	7.5000	240.0000
WQ0391	1979	1979 Average during Diversion Discharge	Assiniboine R. at PR 240, S. of Portage la Prairie	April 20 to June 15, 1979	651862842	16%	10.7500	831.0469
WQ0391	1980	1980 No Discharge	Assiniboine R. at PR 240, S. of Portage la Prairie	No Discharge in 1980	0	0%		
WQ0391	1981	1981 No Discharge	Assiniboine R. at PR 240, S. of Portage la Prairie	No Discharge in 1981	0	0%		
WQ0391	1982	1982 Average during Diversion Discharge	Assiniboine R. at PR 240, S. of Portage la Prairie	April 16 to 20, 1982	36332176	3%	9.5000	460.0000
WQ0391	1983	1983 Average during Diversion Discharge	Assiniboine R. at PR 240, S. of Portage la Prairie	April 4 to May 9, 1983	288731922	10%	11.5000	29.9500
WQ0391	1984	1984 No Discharge	Assiniboine R. at PR 240, S. of Portage la Prairie	No Discharge in 1984	0	0%		
WQ0014	1985	1985 October estimate.	Assiniboine R. at Portage la Prarie W.T.P. reservoir	March 27 to April 3, 1985 (no Spring sample)	55029178	2%	3.5 Oct.	9 Oct.
WQ0014	1986	1986 Average during Diversion Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	March 29 to April 15 and June 6 to15, 1986	115898417	4%	15.5000	---
WQ0014	1987	1987 Average during Diversion Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	April 3 and April 6 to 18, 1987	146126298	5%	4.0000	---
WQ0014	1988	1988 No Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	No Discharge in 1988	0	0%		
WQ0014	1989	1989 Average during Diversion Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	April 17 to April 21, 1989	9845163	1%	0.5000	---
WQ0014	1990	1990 No Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	No Discharge in 1990	0	0%		
WQ0014	1991	1991 No Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	No Discharge in 1991	0	0%		
WQ0014	1992	1992 Average during Diversion Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	March 31 to April 15 and April 23 to May 1, 1992	170873769	12%	8.4500	---
WQ0014	1993	1993 Average during Diversion Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	August 16 to August 23, 1993	5810701	0%	21.0000	---
WQ0014	1994	1994 Average during Diversion Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	July 12 to September 14, 1994	184880618	8%	19.6667	---
WQ0014	1995	1995 Average during Diversion Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	March 25 to May 31, 1995	1375342885	35%	4.5000	---
WQ0014	1996	1996 Average during Diversion Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	April 12 to June 10, 1996	759088022	18%	11.0000	---
WQ0014	1997	1997 Average during Diversion Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	April 3 to May 30, 1997	770892921	16%	5.0000	---
WQ0014	1998	1998 Average during Diversion Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	April 1 to April 9 and April 16 to 21, 1998	65018691	2%	3.0000	---
WQ0014	1999	1999 Average during Diversion Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	March 29 to June 23, 1999	1127679778	28%	12.5000	---
WQ0014	2000	2000 No Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	No Discharge in 2000	0	0%		
WQ0014	2001	2001 Average during Diversion Discharge	Assiniboine R. at Portage la Prarie W.T.P. reservoir	March 21 to May 23 and July 1 to July 6, 2001	757531977	25%	11.1667	---
Diversion	Average		Assiniboine R. at Portage la Prarie W.T.P. reservoir		325153725	9%	9.6465	431.7873
Diversion	Std. Dev.		Assiniboine R. at Portage la Prarie W.T.P. reservoir		462807657	11%	5.5451	Geomean
Whitemud River								
WQ0197	1973	1973 Average	Whitemud R. at Westbourne		91087333	4%	18.5000	582.8477
WQ0197	1974	1974 Average	Whitemud R. at Westbourne		394711777	11%	4.7500	766.4971
WQ0197	1975	1975 Average	Whitemud R. at Westbourne		265224882	6%	8.0000	217.1082
WQ0197	1976	1976 Average	Whitemud R. at Westbourne		475975966	9%	11.8750	682.0996
WQ0197	1977	1977 Average	Whitemud R. at Westbourne		77692137	3%	9.0000	270.4949
WQ0197	1978	1978 Average	Whitemud R. at Westbourne		139310039	6%	9.0417	276.1296
WQ0197	1979	1979 Average	Whitemud R. at Westbourne		529556750	13%	9.2292	523.7706
WQ0197	1980	1980 Average	Whitemud R. at Westbourne		81264189	4%	8.8333	392.0346
WQ0197	1981	1981 Average	Whitemud R. at Westbourne		73227072	6%	9.8125	146.7059
WQ0197	1982	1982 Average	Whitemud R. at Westbourne		112519647	9%	8.6750	140.7334
WQ0197	1983	1983 Average	Whitemud R. at Westbourne		230397372	8%	10.6667	113.5828
WQ0197	1984	1984-01-18	Whitemud R. at Westbourne		69655019	2%	0 Jan.	93 Jan.
WQ0197	1985	1985 No Sample	Whitemud R. at Westbourne		101803490	3%		
WQ0197	1986	1986 Average Oct. & Nov.	Whitemud R. at Westbourne		289336235	9%	2.0000	---
WQ0197	1987	1987 Average	Whitemud R. at Westbourne		170565496	6%	9.3889	---
WQ0197	1988	1988 Average	Whitemud R. at Westbourne		37238645	1%	9.0000	---
WQ0197	1989	1989 Average	Whitemud R. at Westbourne		36167029	2%	8.1875	---
WQ0197	1990	1990 Average	Whitemud R. at Westbourne		59028164	3%	8.4625	---

Table 6. (Continued).

Site	Average for Year of	Description of Average	Location	Assiniboine Diversion Periods of Discharge[1]	Annual Discharge[1] of Water m^3/sec	Contribution of Inflowing Rivers %	Temperature Degrees C	Total Coliform Bacteria (MPN) Bacteria/100 mL
WQ0197	1991	1991 Average	Whitemud R. at Westbourne		58760260	5%	10.2833	---
WQ0197	1992	1992 Average	Whitemud R. at Westbourne		152705235	11%	14.0000	---
WQ0197	1993	1993 Average	Whitemud R. at Westbourne		88854800	6%	8.5000	---
WQ0197	1994	1994 Average	Whitemud R. at Westbourne		71173142	3%	6.7500	---
WQ0197	1995	1995 Average	Whitemud R. at Westbourne		292015274	7%	7.2500	---
WQ0197	1996	1996 Average	Whitemud R. at Westbourne		339344967	8%	11.5714	---
WQ0197	1997	1997 Average	Whitemud R. at Westbourne		101803490	2%	12.5714	---
WQ0197	1998	1998 Average	Whitemud R. at Westbourne		171458509	4%	14.3571	---
WQ0197	1999	1999 Average	Whitemud R. at Westbourne		236648464	6%	14.5833	---
WQ0197	2000	2000 Average	Whitemud R. at Westbourne		178602614	9%	11.5714	---
WQ0197	2001	2001 Average	Whitemud R. at Westbourne		616740900	21%	8.2500	---
WQ0197	Average		Whitemud R. at Westbourne		191133410	7%	9.4682	278.8778
WQ0197	Std. Dev.		Whitemud R. at Westbourne		154404802	4%	3.6898	Geomean
Waterhen River								
WQ0561	1981	1981 Average	Waterhen R. at PR 328 at Waterhen		1057327475	94%	9.5000	3.4087
WQ0561	1982	1982 Average	Waterhen R. at PR 328 at Waterhen		1070722671	88%	7.2000	4.0428
WQ0561	1983	1983 Average	Waterhen R. at PR 328 at Waterhen		2262002106	81%	15.5714	6.6854
WQ0561	1984	1984 Average Jan. & Feb.	Waterhen R. at PR 328 at Waterhen		2925510817	98%	0.0 Winter	2 Winter
WQ0561	1985	1985 No Samples	Waterhen R. at PR 328 at Waterhen		2822814314	95%		
WQ0561	1986	1986 No Samples	Waterhen R. at PR 328 at Waterhen		2767447503	87%		
WQ0561	1987	1987 Average	Waterhen R. at PR 328 at Waterhen		2571877641	89%	12.0000	---
WQ0561	1988	1988 Average	Waterhen R. at PR 328 at Waterhen		2741550124	99%	11.6667	---
WQ0561	1989	1989 Average	Waterhen R. at PR 328 at Waterhen		1442216108	97%	9.6667	---
WQ0561	1990	1990 Average	Waterhen R. at PR 328 at Waterhen		1816388584	97%	9.3667	---
WQ0561	1991	1991 Average	Waterhen R. at PR 328 at Waterhen		1087689919	95%	9.0667	---
WQ0561	1992	1992 Average	Waterhen R. at PR 328 at Waterhen		1060006514	77%	7.0000	---
WQ0561	1993	1993 Average	Waterhen R. at PR 328 at Waterhen		1418997768	94%	11.3333	---
WQ0561	1994	1994 Average	Waterhen R. at PR 328 at Waterhen		2052144035	89%	10.6667	---
WQ0561	1995	1995 Average	Waterhen R. at PR 328 at Waterhen		2291471537	58%	1.0 April only	---
WQ0561	1996	1996 Average	Waterhen R. at PR 328 at Waterhen		3237172378	75%	9.0000	---
WQ0561	1997	1997 Average	Waterhen R. at PR 328 at Waterhen		3998912527	82%	9.0000	---
WQ0561	1998	1998 Average	Waterhen R. at PR 328 at Waterhen		3591698567	94%	14.0000	---
WQ0561	1999	1999 Average	Waterhen R. at PR 328 at Waterhen		2651355804	66%	12.6667	---
WQ0561	2000	2000 Average	Waterhen R. at PR 328 at Waterhen		1919978100	91%	8.0000	---
WQ0561	2001	2001 Average	Waterhen R. at PR 328 at Waterhen		1609999652	54%	11.6667	---
WQ0561	Average		Waterhen R. at PR 328 at Waterhen		2209394483	86%	9.3880	3.6843
WQ0561	Std. Dev.		Waterhen R. at PR 328 at Waterhen		866835245	13%	3.8318	Geomean
Fairford River								
WQ0364	1979	1978 Average	Fairford R. at PTH 6		1661004310	Out flow	8.2500	7.2168
WQ0364	1980	1979 Average	Fairford R. at PTH 6		4848167956	Out flow	7.8083	3.8867
WQ0364	1981	1980 Average	Fairford R. at PTH 6		1985168054	Out flow	8.4583	4.2576
WQ0364	1982	1981 Average	Fairford R. at PTH 6		783172462	Out flow	8.3750	3.1756
WQ0364	1983	1982 Average	Fairford R. at PTH 6		524198672	Out flow	8.4364	2.8290
WQ0364	1984	1983 Average	Fairford R. at PTH 6		1858360198	Out flow	12.3444	3.6217
WQ0364	1985	1984 Average Feb. & Mar.	Fairford R. at PTH 6		1820853649	Out flow	0.0 Winter	1 Winter
WQ0364	1985-	1985 to 1993 No samples	Fairford R. at PTH 6					
WQ0364	1993	1985 to 1993 No samples	Fairford R. at PTH 6					
WQ0364	1994	1994-08-29	Fairford R. at PTH 6		950165906	Out flow	---	---
WQ0364	Average		Fairford R. at PTH 6		1803886401	Out flow	7.6675	3.2567
WQ0364	Std. Dev.		Fairford R. at PTH 6		1348675547	Out flow	3.7135	Geomean

1. Discharge data courtesy of A. Warkenton and R. Harrison (2002).

Table 6. (Continued).

Site	Average for Year of	Fecal Coliform Bacteria (MPN) Bacteria/100 mL	Total Coliform Bacteria (MF) Bacteria/100 mL	Fecal Coliform Bacteria (MF) Bacteria/100 mL	*Escherichia coli* Bacteria Bacteria/100 mL	Specific Conductivity Laboratory uS/cm	Specific Conductivity Field uS/cm	Total Solids mg/L	Total Dissolved Solids mg/L	Total Suspended Solids mg/L	Turbidity Laboratory NTU	Turbidity Field NTU	True Colour Colour Units	pH Laboratory pH Units	pH Field pH Units	Total Alkalinity mg/L
Assiniboine Diversion est.																
WQ0014	1971	---	---	---	---	550.0000	---	550.0000	360.0000	190.0000	---	---	---	7.8000	---	140.0000
WQ0014	1972	---	---	---	---	630.0000	---	605.0000	530.0000	75.0000	---	---	---	8.4000	---	200.0000
WQ0014	1973															
WQ0014	1974	60.0000	---	---	---	676.6626	---	756.6667	460.0000	290.0000	87.5000	---	63.3333	8.1033	---	209.6667
WQ0014	1975	23.0000	---	---	---	645.0000	---	610.0000	460.0000	150.0000	60.0000	---	35.0000	8.1000	---	180.0000
WQ0014	1976	1500.0000	---	---	---	655.0000	---	686.0000	413.0000	273.0000	100.0000	---	30.0000	8.2000	---	188.0000
WQ0014	1977															
WQ0391	1978	23.0000	---	---	---	637.0000	600.0000	---	---	832.0000	---	---	---	8.1000	8.0500	---
WQ0391	1979	53.6572	---	---	---	664.2106	573.3333	---	---	473.3333	---	---	---	8.0667	7.8000	---
WQ0391	1980															
WQ0391	1981															
WQ0391	1982	21.0000	---	---	---	398.0000	412.0000	---	---	140.0000	75.0000	---	---	8.1500	7.4100	---
WQ0391	1983	12.6886	---	---	---	594.4746	618.5000	---	---	155.0000	62.5000	---	---	8.0250	7.5300	---
WQ0391	1984															
WQ0014	1985	4 Oct.	---	---	---	---	940 Oct.	656 Oct.	630 Oct.	26 Oct.	10 Oct.	---	10 Oct.	8.35 Oct.	8.45 Oct.	296 Oct.
WQ0014	1986	---	---	22.3607	---	---	---	635.0000	425.0000	210.0000	85.0000	41.0000	32.5000	8.2000	8.2000	194.0000
WQ0014	1987	---	---	20.0000	---	---	427.0000	1330.0000	160.0000	1170.0000	200.0000	200.0000	40.0000	---	8.0500	132.0000
WQ0014	1988															
WQ0014	1989	---	---	---	---	649.0000	652.0000	550.0000	420.0000	130.0000	73.0000	87.0000	20.0000	7.9000	8.3000	202.0000
WQ0014	1990															
WQ0014	1991															
WQ0014	1992	---	---	10.0000	---	617.3735	628.0000	635.0000	370.0000	266.5000	125.0000	155.5000	45.0000	8.1400	8.1250	172.0000
WQ0014	1993	---	---	110.0000	---	794.0000	817.0000	550.0000	530.0000	23.0000	15.0000	25.0000	25.0000	8.4900	8.5500	262.0000
WQ0014	1994	---	---	18.1712	---	881.8204	807.0000	633.3333	610.0000	29.6667	22.6667	28.0000	16.6667	8.5833	8.5333	262.6667
WQ0014	1995	---	---	10.0000	---	499.1944	451.0000	600.0000	350.0000	229.5000	129.5000	181.5000	50.0000	7.8950	7.8250	156.5000
WQ0014	1996	---	---	12.5992	---	785.9432	814.3333	636.6667	530.0000	104.3333	69.3333	85.0000	26.6667	8.1367	8.0500	229.6667
WQ0014	1997	---	---	10.0000	---	568.6273	517.0000	495.0000	390.0000	106.5000	72.0000	84.0000	60.0000	8.0100	8.0500	163.5000
WQ0014	1998	---	---	30.0000	---	417.0000	410.0000	1000.0000	210.0000	840.0000	450.0000	520.0000	70.0000	8.0000	7.8500	126.0000
WQ0014	1999	---	---	12.5992	---	699.3598	705.3333	---	481.6667	238.3333	150.6667	137.0000	83.3333	8.2467	8.1000	193.6667
WQ0014	2000															
WQ0014	2001	---	---	---	---	688.0074	---	---	483.0000	325.0000	118.6667	---	46.6667	7.9600	---	203.6667
Diversion	Average	35.8408	NA	18.3193	NA	634.2460	624.8333	683.0417	434.0370	285.3258	105.8796	140.3636	40.8854	8.1360	8.0546	195.0741
Diversion	Std. Dev.	Geomean	NA	Geomean	NA	119.0144	166.5460	206.7522	120.6841	295.8155	98.2374	139.4669	20.5063	0.1968	0.3235	45.9347
Whitemud River																
WQ0197	1973	460.0000	---	---	---	592.8029	---	460.0000	425.0000	35.0000	---	---	---	8.3467	---	236.0000
WQ0197	1974	144.2129	---	---	---	581.6850	---	472.5000	421.8750	51.2500	33.0000	---	36.2500	8.0925	---	247.5000
WQ0197	1975	42.9717	---	---	---	660.4673	---	488.0000	453.7500	36.7500	14.5000	---	32.0000	7.9750	---	285.0000
WQ0197	1976	156.7332	---	---	---	658.1987	---	458.5000	428.7500	29.7500	14.3750	---	39.2500	8.1625	---	266.0000
WQ0197	1977	157.1184	---	---	---	697.3401	---	511.0000	459.0000	53.2500	24.8750	---	18.7500	8.1000	---	310.0000
WQ0197	1978	77.3420	---	---	---	651.0000	620.9091	---	---	32.6667	---	---	---	8.0625	8.0042	---
WQ0197	1979	60.2302	---	---	---	621.3751	632.7500	---	---	21.4167	---	---	---	7.8783	7.7000	---
WQ0197	1980	139.9092	---	---	---	666.6876	671.7500	320.0000	280.0000	21.9167	20.0000	---	40.0000	7.9708	7.8809	---
WQ0197	1981	55.5005	---	---	---	638.7728	670.0583	---	---	35.6667	19.1250	---	18.0000	8.1208	8.1842	---
WQ0197	1982	57.1963	---	---	---	683.0780	722.6167	---	---	20.0000	11.5833	---	---	8.0708	7.6517	---
WQ0197	1983	34.3929	---	---	---	636.3404	615.6364	---	---	28.5000	19.8333	---	---	7.9792	7.7618	---
WQ0197	1984	93 Jan.	---	---	---	1230 Jan.	1059 Jan.	---	---	5 Jan.	20 Jan.	---	---	7.35 Jan.	6.95 Jan.	---
WQ0197	1985															
WQ0197	1986	---	---	59.1608	---	617.0000	840.0000	520.0000	500.0000	20.0000	11.8000	23.0000	---	8.0000	7.8500	---
WQ0197	1987	---	---	23.9820	---	695.1861	607.2857	436.4444	422.2222	14.2222	6.9156	18.1500	---	7.9500	8.1538	---
WQ0197	1988	---	---	11.2983	---	758.5960	802.8889	513.5556	504.4444	9.1111	5.5356	10.7889	---	8.0556	8.1333	---
WQ0197	1989	---	---	17.0674	---	734.3837	741.7500	474.8750	465.0000	9.8750	5.6350	11.3250	---	7.9029	8.1063	---
WQ0197	1990	---	*50.0000*	*15.6508*	---	738.8660	723.5000	471.2500	462.5000	9.6250	3.7138	8.3750	---	8.0000	7.9563	---

Table 6. (Continued).

Site	Average for Year of	Fecal Coliform Bacteria (MPN) Bacteria/100 mL	Total Coliform Bacteria (MF) Bacteria/100 mL	Fecal Coliform Bacteria (MF) Bacteria/100 mL	*Escherichia coli* Bacteria Bacteria/100 mL	Specific Conductivity Laboratory uS/cm	Specific Conductivity Field uS/cm	Total Solids mg/L	Total Dissolved Solids mg/L	Total Suspended Solids mg/L	Turbidity Laboratory NTU	Turbidity Field NTU	True Colour Colour Units	pH Laboratory pH Units	pH Field pH Units	Total Alkalinity mg/L
WQ0197	1991	---	---	21.9551	---	734.2594	743.0000	460.0000	451.6667	11.1667	7.5000	10.3167	---	7.9717	7.9500	---
WQ0197	1992	---	---	64.0312	---	676.3845	657.0000	415.0000	415.0000	5.0000	3.2000	12.8500	40.0000	8.0800	8.1000	264.0000
WQ0197	1993	---	---	14.4225	---	639.1079	663.0000	425.0000	417.5000	10.5000	5.1500	10.3750	23.7500	7.9500	7.9500	284.0000
WQ0197	1994	---	---	21.1474	---	698.5586	800.3333	467.5000	462.5000	6.2500	6.1750	8.3000	23.7500	7.9375	7.8500	318.0000
WQ0197	1995	---	---	14.1421	---	614.8463	655.5000	460.0000	455.0000	19.2500	12.1250	17.2000	35.0000	7.8400	7.9500	272.2500
WQ0197	1996	---	---	12.8089	---	637.5284	733.7500	465.0000	422.8571	9.7857	8.4571	8.8250	32.5000	8.0114	7.7125	312.7500
WQ0197	1997	---	---	18.6441	---	665.5456	668.2500	457.5000	457.8571	12.2143	10.8857	12.9500	33.7500	8.0579	7.9875	284.7500
WQ0197	1998	---	---	24.0461	---	654.3785	674.0000	467.5000	453.5714	61.4286	35.2286	239.0500	41.2500	8.1729	8.0125	274.2500
WQ0197	1999	---	---	17.8260	---	721.2922	674.6667	---	525.8333	58.0000	35.0583	24.7000	53.3333	8.1992	8.1500	249.3333
WQ0197	2000	---	---	43.0316	49.3771	685.7481	776.6667	---	455.7143	23.6429	17.9000	17.1500	43.7500	8.1300	8.1000	275.7500
WQ0197	2001	---	---	10.0000	10.0000	646.4492	898.0000	---	453.5000	36.4167	18.2000	7.4000	44.2500	7.8771	7.5000	249.0000
WQ0197	Average	93.8106	50.0000	20.7083	22.2210	686.9957	724.0136	460.1908	445.1610	24.5591	14.8309	27.5472	34.7240	8.0088	7.8954	275.2389
WQ0197	Std. Dev.	Geomean	Geomean	Geomean	Geomean	115.3382	104.9799	43.4022	46.8212	16.5133	9.5139	56.6422	9.7595	0.1705	0.2738	24.7804
Waterhen River																
WQ0561	1981	1.4142	---	---	---	1545.0770	1541.3600	---	---	12.8000	6.9000	---	---	8.4740	8.4520	---
WQ0561	1982	2.2938	---	---	---	2322.0934	2562.6900	---	---	8.5000	3.1500	---	---	8.1500	7.7640	---
WQ0561	1983	3.4997	---	---	---	1416.5716	1327.1667	---	---	9.1429	2.5357	---	---	8.3964	8.0400	---
WQ0561	1984	1 Winter	---	---	---	2070 Winter	1853 Winter	---	---	5.5 Winter	1 Winter	---	---	7.475 Winte	.285 Wint	---
WQ0561	1985															
WQ0561	1986															
WQ0561	1987	---	---	14.1421	---	---	1350.5000	833.0000	820.0000	13.0000	6.8500	13.7500	7.5000	8.4000	8.5750	143.0000
WQ0561	1988	1414.0000	---	18.1712	---	1273.1947	1316.3333	732.0000	723.3333	8.6667	4.6000	9.6000	6.6667	8.4000	8.5500	140.6667
WQ0561	1989	---	---	10.0000	---	1641.2919	1638.6667	948.3333	940.0000	7.0000	1.8100	4.1667	8.3333	8.1150	8.3667	170.6667
WQ0561	1990	---	---	10.0000	---	1584.5200	1610.0000	980.0000	976.6667	5.3333	2.3633	3.4667	23.3333	8.0233	8.1167	174.6667
WQ0561	1991	---	---	10.0000	---	1465.9754	1443.6667	823.3333	816.6667	8.0000	4.4333	5.3667	6.6667	8.1600	8.2667	155.3333
WQ0561	1992	---	---	10.0000	---	1582.1346	1619.0000	943.3333	940.0000	8.0000	1.8333	6.7000	6.6667	8.0633	8.0333	183.3333
WQ0561	1993	---	---	10.0000	---	1487.5480	1469.6667	836.6667	830.0000	7.6667	3.2000	5.0333	5.0000	8.2767	8.2667	160.0000
WQ0561	1994	---	---	10.0000	---	1544.6486	1719.5000	932.5000	932.5000	5.5000	2.0500	3.9333	6.2500	8.3675	8.0000	159.2500
WQ0561	1995	---	---	10.0000	---	1347.1942	1618.0000	786.6667	786.6667	5.0000	2.6333	4.5000	6.6667	8.4967	7.6000	150.0000
WQ0561	1996	---	---	10.0000	---	1213.1598	1236.6667	696.6667	686.6667	6.6667	3.1667	3.9333	10.0000	8.2400	8.1000	160.3333
WQ0561	1997	---	---	10.0000	---	1357.2472	1419.5000	770.0000	766.6667	5.3333	2.2333	4.0500	15.0000	7.9967	7.9500	159.3333
WQ0561	1998	---	---	10.0000	---	1421.8156	1424.0000	873.3333	866.6667	8.6667	3.5667	4.5333	10.0000	8.3167	8.2750	150.0000
WQ0561	1999	---	---	10.0000	---	1335.7262	1340.6667	---	736.6667	5.0000	2.7333	4.3000	25.0000	8.4600	8.4667	148.0000
WQ0561	2000	---	---	10.0000	10.0000	1409.3524	1415.3333	---	776.6667	6.0000	3.9333	5.2333	8.3333	8.4000	8.3500	149.0000
WQ0561	2001	---	---	---	---	1316.3043	---	---	753.0000	4.0000	1.9567	---	6.6667	8.0133	---	161.0000
WQ0561	Average	6.9360	NA	10.6974	10.0000	1518.5475	1550.3176	846.3194	823.4778	7.3566	3.2078	5.6119	10.1389	8.2223	8.1365	157.6389
WQ0561	Std. Dev.	Geomean	NA	Geomean	Geomean	275.8093	299.2004	91.2005	89.6410	2.4747	1.5862	2.8113	6.1755	0.2463	0.3387	11.7758
Fairford River																
WQ0364	1979	1.6984	---	---	---	1551.4562	1463.6364	---	---	12.4167	---	---	---	8.2792	8.0364	---
WQ0364	1980	1.6297	---	---	---	1540.5574	1484.4167	---	---	12.8333	---	---	---	8.2167	7.8958	---
WQ0364	1981	2.0396	---	---	---	1507.4189	1473.2500	---	---	13.1667	---	---	---	8.3333	8.0358	---
WQ0364	1982	1.4595	---	---	---	1499.8422	1485.8000	---	---	15.9167	10.3333	---	---	8.3392	8.3000	---
WQ0364	1983	2.0354	---	---	---	1679.4106	1603.5909	---	---	11.8182	4.6364	---	---	8.4136	7.7427	---
WQ0364	1984	1.7542	---	---	---	1677.5104	1493.0625	---	---	11.9500	4.7000	---	---	8.3500	7.8788	---
WQ0364	1985	1 Winter	---	---	---	1979 Winter	1765 Winter	---	---	7.5 Winter	1.25 Winter	---	---	8.30 Winter	.30 Winte	---
WQ0364	1985-															
WQ0364	1993															
WQ0364	1994	---	---	10 Aug.	---	1830 Aug.	---	1100 Aug.	1100 Aug.	< 5 Aug.	8.1 Aug.	---	5 Aug.	8.59 Aug.	---	174 Aug.
WQ0364	Average	1.6211	NA	10.0000	NA	1658.1495	1538.3938	1100.0000	1100.0000	12.2288	5.8039	NA	5.0000	8.3527	7.8842	174.0000
WQ0364	Std. Dev.	Geomean	NA	Geomean	NA	171.6711	110.4295	NA	NA	2.4996	3.5038	NA	NA	0.1117	0.3110	NA

Table 6. (Continued).

Site	Average for Year of	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Calcium Extractable	Calcium Total	Calcium Dissolved	Magnesium Extractable	Magnesium Total	Magnesium Dissolved	Hardness (CaCO3)	Manganese Extractable	Manganese Total	Manganese Dissolved	Iron Extractable	Iron Total	Iron Dissolved	Potassium Extractable
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Assiniboine Diversion est.																		
WQ0014	1971	171.0000	0.0000	0.0000	---	---	---	---	---	---	200.0000	---	---	---	---	---	---	---
WQ0014	1972	215.0000	14.0000	0.0000	---	---	---	---	---	---	230.0000	---	---	---	---	---	---	10.0000
WQ0014	1973																	
WQ0014	1974	254.0000	0.8000	0.0000	---	---	---	23.0000	---	---	297.6667	---	---	---	---	---	---	11.7500
WQ0014	1975	220.0000	0.0000	0.0000	52.5000	---	---	26.0000	---	---	238.0000	0.2700	---	---	0.0800	---	---	14.0000
WQ0014	1976	229.0000	0.0000	0.0000	62.5000	---	---	31.0000	---	---	283.0000	0.2900	---	---	3.8000	---	---	13.0000
WQ0014	1977																	
WQ0391	1978	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1979	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1980																	
WQ0391	1981																	
WQ0391	1982	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1983	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1984																	
WQ0014	1985	356 Oct.	2.4 Oct	0 Oct.	91.5 Oct.	---	---	52 Oct	---	---	443 Oct.	0.15 Oct	---	---	0.69 Oct	---	---	9 Oct.
WQ0014	1986	227.0000	4.8000	0.0000	49.4000	---	---	22.6000	---	---	216.0000	0.3900	---	---	4.8700	---	---	8.0000
WQ0014	1987	161.0000	0.0000	0.0000	85.2000	---	---	32.1000	---	---	345.0000	1.1000	---	---	6.7700	---	---	8.5000
WQ0014	1988																	
WQ0014	1989	246.4000	0.0000	0.0000	72.4000	---	---	29.9000	---	---	304.0000	0.2300	---	---	2.7300	---	---	6.5000
WQ0014	1990																	
WQ0014	1991																	
WQ0014	1992	210.0000	0.6000	0.3400	64.3000	---	---	29.6500	---	---	282.5000	0.3400	---	---	3.7000	---	---	9.0000
WQ0014	1993	293.0000	13.2000	0.3400	69.4000	---	---	35.6000	---	---	320.0000	0.1400	---	---	0.4200	---	---	7.5000
WQ0014	1994	281.3333	19.6000	10.2000	67.7667	---	---	39.4000	---	---	331.3333	0.1600	---	---	0.6033	---	---	9.6667
WQ0014	1995	190.5000	18.0000	10.2000	50.3000	---	---	23.3500	---	---	221.5000	0.2800	---	---	2.6650	---	---	11.4000
WQ0014	1996	278.6667	18.0000	10.2000	69.7000	---	---	37.2000	---	---	410.0000	0.1837	---	---	1.3000	---	---	12.2333
WQ0014	1997	200.0000	20.0000	10.0000	53.2500	---	---	24.1500	---	---	212.0000	0.1550	---	---	0.7800	---	---	12.0000
WQ0014	1998	153.0000	20.0000	10.0000	64.3000	66.4000	34.0000	25.3000	28.9000	15.5000	265.0000	0.8760	0.9850	0.0050	6.3900	25.2000	0.0400	9.9000
WQ0014	1999	230.6667	20.0000	10.0000	---	56.5000	---	---	27.1000	---	253.0000	---	0.4315	---	---	9.7950	---	---
WQ0014	2000																	
WQ0014	2001	245.6667	1.8333	0.5000	---	67.8000	---	---	37.6000	---	345.5000	---	0.3890	---	---	6.0500	---	
Diversion	Average	231.2352	8.5130	3.4322	65.5782	63.5667	34.0000	30.8036	31.2000	15.5000	288.7500	0.3511	0.6018	0.0050	2.6768	13.6817	0.0400	10.163333
Diversion	Std. Dev.	50.4557	8.8487	4.8541	12.8154	6.1598	NA	8.1917	5.6152	NA	68.3868	0.2967	0.3325	NA	2.2957	10.1494	NA	2.1626905
Whitemud River																		
WQ0197	1973	265.0000	11.1333	0.0000	---	---	---	30.0000	---	---	310.0000	---	---	---	0.0500	---	---	5.6667
WQ0197	1974	282.0000	9.7500	0.0000	85.0000	---	---	38.0000	---	---	308.8750	0.0333	---	---	0.5350	---	---	7.4333
WQ0197	1975	347.7500	0.0000	0.0000	82.6250	---	---	39.2500	---	---	368.0000	0.0733	---	---	0.6225	---	---	6.7500
WQ0197	1976	322.0000	1.2000	0.0000	75.6250	---	---	36.7500	---	---	340.0000	0.1225	---	---	0.3475	---	---	10.3750
WQ0197	1977	373.5000	2.4000	0.0000	83.3750	---	---	40.2500	---	---	373.7500	0.2300	---	---	0.4725	---	---	7.5000
WQ0197	1978	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1984	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1985																	
WQ0197	1986	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 6. (Continued).

Site	Average for Year of	Bicarbonate Alkalinity mg/L	Carbonate Alkalinity mg/L	Hydroxide Alkalinity mg/L	Calcium Extractable mg/L	Calcium Total mg/L	Calcium Dissolved mg/L	Magnesium Extractable mg/L	Magnesium Total mg/L	Magnesium Dissolved mg/L	Hardness (CaCO3) mg/L	Manganese Extractable mg/L	Manganese Total mg/L	Manganese Dissolved mg/L	Iron Extractable mg/L	Iron Total mg/L	Iron Dissolved mg/L	Potassium Extractable mg/L
WQ0197	1991	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1992	322.0000	0.6000	0.3400	71.6500	---	---	33.1500	---	---	315.5000	0.0600	---	---	0.2350	---	---	7.3000
WQ0197	1993	346.7500	0.6000	0.3400	70.5500	---	---	31.3000	---	---	305.0000	0.0800	---	---	0.2850	---	---	6.1000
WQ0197	1994	387.7500	9.3000	5.2700	80.5250	---	---	37.6000	---	---	355.7500	0.2200	---	---	0.2675	---	---	8.0750
WQ0197	1995	332.0000	18.0000	10.2000	74.6000	---	---	30.8750	---	---	313.2500	0.0573	---	---	0.3625	---	---	8.0175
WQ0197	1996	375.2500	18.0000	10.2000	80.2500	---	---	34.1250	---	---	341.0000	0.0418	---	---	0.1575	---	---	7.9700
WQ0197	1997	341.0000	19.5000	10.0500	75.7750	68.6000	65.7000	31.0250	29.3000	29.0000	317.0000	0.0518	0.0360	0.0050	0.2375	0.3600	0.0200	7.5200
WQ0197	1998	334.2500	20.0000	10.0000	72.5500	80.9500	70.9000	27.3000	34.7750	27.3000	339.0000	0.0830	0.0750	0.0100	0.8300	1.3225	0.0600	7.4000
WQ0197	1999	303.6667	20.0000	10.0000	---	71.6333	---	---	38.2333	---	336.3333	---	0.0815	---	---	1.0767	---	---
WQ0197	2000	328.2500	20.0000	10.0000	---	73.4750	---	---	42.3250	---	357.7500	---	0.0896	---	---	0.8550	---	---
WQ0197	2001	304.0000	5.3750	2.8750	---	70.1000	---	---	35.3500	---	321.0000	---	0.1663	---	---	0.8875	---	---
WQ0197	Average	331.0111	10.3906	4.6183	77.5023	72.9517	68.3000	34.1354	35.9967	28.1500	333.4806	0.0957	0.0896	0.0075	0.3669	0.9003	0.0400	7.5090
WQ0197	Std. Dev.	33.8355	8.2424	4.8212	5.0564	4.8232	3.6770	4.1611	4.7908	1.2021	22.6206	0.0683	0.0475	0.0035	0.2163	0.3548	0.0283	1.1686
Waterhen River																		
WQ0561	1981	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1983	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1984	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1985																	
WQ0561	1986																	
WQ0561	1987	164.5000	4.8000	0.0000	42.2000	---	---	28.1000	---	---	221.5000	0.0250	---	---	0.0850	---	---	8.0000
WQ0561	1988	165.0000	3.2000	0.0000	42.2333	---	---	27.5000	---	---	219.0000	0.0967	---	---	0.1233	---	---	8.0000
WQ0561	1989	195.4000	6.3667	0.0000	51.4667	---	---	33.9000	---	---	268.0000	0.0367	---	---	0.0667	---	---	9.6333
WQ0561	1990	202.0000	5.6000	0.0000	51.7000	---	---	33.0667	---	---	265.0000	0.0567	---	---	0.0467	---	---	10.4000
WQ0561	1991	178.3333	5.5733	0.0000	39.7667	---	---	27.2667	---	---	212.0000	0.0500	---	---	0.0367	---	---	9.8333
WQ0561	1992	215.6667	4.2000	0.3400	52.5000	---	---	34.3333	---	---	272.0000	0.0467	---	---	0.0433	---	---	10.7000
WQ0561	1993	185.0000	4.9900	0.3400	48.7667	---	---	32.3667	---	---	255.0000	0.0267	---	---	0.0833	---	---	10.0667
WQ0561	1994	170.5000	14.8250	7.7350	44.5750	---	---	33.0500	---	---	247.5000	0.0275	---	---	0.0500	---	---	10.6250
WQ0561	1995	149.6333	22.5000	10.2000	40.7667	---	---	29.2333	---	---	222.3333	0.0157	---	---	0.0300	---	---	9.6100
WQ0561	1996	189.0000	18.0000	10.2000	45.7667	---	---	27.1000	---	---	225.6667	0.0137	---	---	0.0533	---	---	8.8600
WQ0561	1997	194.6667	20.0000	10.0000	47.7667	42.5000	42.2000	25.8000	25.4000	25.2000	225.3333	0.0157	0.0080	0.0050	0.0200	0.1000	0.0100	8.7600
WQ0561	1998	177.0000	20.0000	10.0000	50.6000	44.8333	47.9000	26.6000	27.7333	27.2000	226.3333	0.0140	0.0161	0.0050	0.0300	0.0433	0.0100	9.2000
WQ0561	1999	162.0000	20.0000	10.0000	---	43.3333	---	---	28.3667	---	225.0000	---	0.0115	---	---	0.0433	---	---
WQ0561	2000	155.6667	20.0000	10.0000	---	46.9667	---	---	31.3333	---	246.3333	---	0.0113	---	---	0.1667	---	---
WQ0561	2001	192.6667	2.1333	0.5000	---	41.9000	---	---	28.8000	---	223.3333	---	0.0248	---	---	0.0800	---	---
WQ0561	Average	179.8022	11.4792	4.6210	46.5090	43.9067	45.0500	29.8597	28.3267	26.2000	236.9556	0.0354	0.0143	0.0050	0.0557	0.0867	0.0100	9.4740
WQ0561	Std. Dev.	18.6696	7.8229	4.9863	4.5767	2.0345	4.0305	3.2134	2.1321	1.4142	20.0086	0.0243	0.0065	0.0000	0.0295	0.0509	0.0000	0.9301
Fairford River																		
WQ0364	1979	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1984	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1985	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1985-																	
WQ0364	1993																	
WQ0364	1994	180 Aug.	18.0 Aug.	10.2 Aug.	41.5 Aug.	---	---	45.3 Aug.	---	---	290 Aug.	0.020 Aug.	---	---	0.08 Aug.	---	---	14.4 Aug.
WQ0364	Average	180.0000	18.0000	10.2000	41.5000	NA	NA	45.3000	NA	NA	290.0000	0.0200	NA	NA	0.0800	NA	NA	14.4000
WQ0364	Std. Dev.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6. (Continued).

Site	Average for Year of	Potassium Total mg/L	Potassium Dissolved mg/L	Sodium Extractable mg/L	Sodium Total mg/L	Sodium Dissolved mg/L	Chloride mg/L	Sulphate mg/L	Boron Extractable mg/L	Boron Soluble mg/L	Dissolved Oxygen mg/L	B.O.D. mg/L	Total Carbon mg/L	Total Organic Carbon mg/L	Total Inorganic Carbon mg/L	Total Kjeldahl Nitrogen mg/L	Total Kjeldahl Nitrogen Dissolved mg/L
Assiniboine Diversion est.																	
WQ0014	1971	---	---	33.0000	---	---	14.0000	100.0000	---	---	10.2000	2.1000	---	---	---	---	---
WQ0014	1972	---	---	33.0000	---	---	10.0000	120.0000	---	---	7.3000	0.4000	---	---	---	---	---
WQ0014	1973																
WQ0014	1974	---	---	47.0000	---	---	20.8333	167.0000	---	---	7.9000	1.5667	---	33.5000	46.5000	0.7000	---
WQ0014	1975	---	---	50.0000	---	---	17.0000	165.0000	---	---	7.5000	1.0000	---	18.5000	40.5000	0.9000	---
WQ0014	1976	---	---	48.0000	---	---	15.0000	150.0000	---	---	9.3000	---	---	19.0000	43.5000	1.1000	---
WQ0014	1977																
WQ0391	1978	---	---	---	---	---	---	---	---	---	11.3000	---	---	21.5000	37.5000	2.7000	---
WQ0391	1979	---	---	---	---	---	---	---	---	---	10.6333	---	---	23.3333	37.2500	1.1500	---
WQ0391	1980																
WQ0391	1981																
WQ0391	1982	---	---	---	---	---	---	---	---	---	11.3000	---	---	11.5000	21.5000	1.1000	---
WQ0391	1983	---	---	---	---	---	---	---	---	---	11.7500	---	---	14.5000	40.5000	1.1000	---
WQ0391	1984																
WQ0014	1985	---	---	83.9 Oct.	---	---	36 Oct.	203 Oct.	0.18 Oct.	---	12.9 Oct.	---	---	---	---	0.9 Oct.	---
WQ0014	1986	---	---	28.0000	---	---	14.0000	83.0000	0.0800	---	9.3000	---	---	24.5000	21.8000	1.1000	0.8250
WQ0014	1987	---	---	23.2000	---	---	11.0000	75.0000	0.1200	---	12.4000	---	---	29.7000	34.9000	1.3500	1.1500
WQ0014	1988																
WQ0014	1989	---	---	26.3000	---	---	18.0000	135.0000	0.2100	---	12.1000	---	---	9.0000	22.0000	---	---
WQ0014	1990																
WQ0014	1991																
WQ0014	1992	---	---	35.0000	---	---	18.5000	132.0000	0.1050	---	11.2000	---	57.0000	13.0000	44.0000	1.1900	0.7050
WQ0014	1993	---	---	56.6000	---	---	28.0000	178.0000	0.1400	---	8.6000	---	74.0000	11.0000	63.0000	0.8700	0.6700
WQ0014	1994	---	---	73.9000	---	---	37.6667	214.6667	0.1733	---	8.6333	---	61.4667	13.7667	58.2667	1.0733	0.7300
WQ0014	1995	---	---	31.2000	---	---	14.0000	132.5000	0.1100	---	14.2000	---	48.9500	14.1500	36.0500	1.5350	1.0100
WQ0014	1996	---	---	55.3000	---	---	23.0000	224.3333	---	0.1000	9.7667	---	64.6000	11.9667	52.6333	1.2400	0.9250
WQ0014	1997	---	---	32.6000	---	---	15.0000	117.0000	---	0.0600	11.3000	---	53.8000	15.6000	38.2000	1.0950	---
WQ0014	1998	14.2000	9.2000	22.3000	23.1000	22.9000	10.0000	99.0000	---	0.0500	8.6000	3.0000	41.0000	13.0000	28.0000	2.1000	---
WQ0014	1999	12.9000	---	---	31.7500	---	18.0000	120.5000	---	---	9.6333	2.3333	58.8333	13.0000	45.8333	1.4500	---
WQ0014	2000																
WQ0014	2001	9.8967			43.4667	---	16.8333	167.3333	---	0.0950	9.4000	3.3333	62.6667	14.0000	48.3333	2.0667	---
Diversion	Average	12.3322	9.2	42.45625	32.7722	22.9000	18.7130	143.5185	0.1398	0.0763	10.2371	1.9619	58.0352	17.0798	40.0140	1.3011	0.8593
Diversion	Std. Dev.	2.2071	NA	18.046162	10.2217	NA	7.9715	43.5809	0.0443	0.0250	1.8292	1.0517	9.5104	6.6485	11.5395	0.4958	0.1775
Whitemud River																	
WQ0197	1973	---	---	19.3333	---	---	26.3333	69.0000	---	---	8.8333	1.4000	---	21.8333	50.5000	0.8000	---
WQ0197	1974	---	---	26.5000	---	---	24.8750	66.1250	---	---	8.3375	2.0875	---	15.0000	55.2500	1.0333	---
WQ0197	1975	---	---	21.7500	---	---	17.2500	81.0000	---	---	7.1750	1.2000	---	38.3750	64.3750	0.7750	---
WQ0197	1976	---	---	22.2500	---	---	21.7500	77.5000	---	---	6.8500	2.0000	---	20.7500	61.7500	1.1000	---
WQ0197	1977	---	---	28.5000	---	---	36.0000	70.2500	---	---	6.8000	1.6500	---	19.5000	73.2500	0.9875	---
WQ0197	1978	---	---	---	---	---	---	---	---	---	9.0917	---	---	17.7917	70.2083	0.6333	---
WQ0197	1979	---	---	---	---	---	---	---	---	---	8.4000	---	---	24.4250	60.3750	0.8708	---
WQ0197	1980	---	---	---	---	---	9.0000	---	---	---	8.7250	7.0000	---	17.4583	69.9167	0.8167	---
WQ0197	1981	---	---	---	---	---	---	---	---	---	9.0833	---	---	18.9167	71.1250	0.8750	---
WQ0197	1982	---	---	---	---	---	---	---	---	---	8.0417	---	---	19.8500	66.1500	0.9542	---
WQ0197	1983	---	---	---	---	---	---	---	---	---	7.9167	---	---	30.3750	66.8333	0.9000	---
WQ0197	1984	---	---	---	---	---	---	---	---	---	2.8 Jan.	---	---	29.0 Jan.	120.0 Jan.	1.5 Jan.	---
WQ0197	1985																
WQ0197	1986	---	---	---	---	---	---	---	---	---	9.5000	2.3000	---	---	---	1.0500	---
WQ0197	1987	---	---	---	---	---	---	---	---	---	8.6250	2.2556	---	55.3000	68.8000	1.1000	---
WQ0197	1988	---	---	---	---	---	---	---	---	---	7.6444	2.1667	---	---	---	0.9222	---
WQ0197	1989	---	---	---	---	---	---	---	---	---	7.2857	1.3500	---	---	---	0.9625	---
WQ0197	1990	---	---	---	---	---	---	---	---	---	7.1875	1.2000	---	---	---	0.9125	---

Table 6. (Continued).

Site	Average for Year of	Potassium Total mg/L	Potassium Dissolved mg/L	Sodium Extractable mg/L	Sodium Total mg/L	Sodium Dissolved mg/L	Chloride mg/L	Sulphate mg/L	Boron Extractable mg/L	Boron Soluble mg/L	Dissolved Oxygen mg/L	B.O.D. mg/L	Total Carbon mg/L	Total Organic Carbon mg/L	Total Inorganic Carbon mg/L	Total Kjeldahl Nitrogen mg/L	Total Kjeldahl Nitrogen Dissolved mg/L
WQ0197	1991	---	---	---	---	---	---	---	---	---	6.5833	1.4000	---	---	---	0.8917	---
WQ0197	1992	---	---	22.2000	---	---	24.5000	78.0000	0.1250	---	7.8500	---	69.2500	6.0000	66.0000	0.9000	0.4150
WQ0197	1993	---	---	20.3350	---	---	23.0000	25.3000	0.1050	---	9.0000	---	73.8750	8.6250	66.6250	0.8975	0.8300
WQ0197	1994	---	---	24.6000	---	---	29.7500	38.0000	0.1125	---	5.7750	---	87.6250	16.2000	75.1750	1.0200	0.9300
WQ0197	1995	---	---	21.1675	---	---	23.7500	20.5000	0.0933	0.0700	8.1250	---	75.2250	10.8250	64.8000	1.2250	1.0175
WQ0197	1996	---	---	23.2000	---	---	25.0000	15.0000	---	0.0575	6.9643	---	90.9000	14.5000	76.4000	1.1114	0.9600
WQ0197	1997	6.0000	6.6000	21.8750	34.0000	34.1000	28.2500	18.2500	---	0.0750	6.0571	---	81.4000	10.9750	70.4250	0.9629	---
WQ0197	1998	8.2000	7.7000	17.2500	22.1250	18.4500	26.2500	51.7500	---	0.0600	6.2143	---	80.2500	14.0000	66.2500	1.3071	---
WQ0197	1999	8.6567	---	---	21.8667	---	17.3333	100.6667	---	---	8.9250	---	75.3333	16.3333	59.0000	1.5000	---
WQ0197	2000	8.8175	---	---	25.0500	---	23.2500	105.5000	---	---	8.3083	---	79.7500	12.7500	67.0000	1.3357	---
WQ0197	2001	8.0400	---	---	18.4375	---	17.5500	110.3250	---	0.0500	6.8417	---	77.0000	16.7500	60.0000	2.6214	---
WQ0197	Average	7.9428	7.1500	22.4134	24.2958	26.2750	23.3651	61.8111	0.1090	0.0625	7.6050	2.1675	79.0608	19.8058	68.2699	1.0702	0.8305
WQ0197	Std. Dev.	1.1319	0.7778	3.0446	5.9092	11.0662	6.1346	32.2786	0.0133	0.0100	1.3910	1.5782	6.4711	10.6196	12.8380	0.3670	0.2420
Waterhen River																	
WQ0561	1981	---	---	---	---	---	---	---	---	---	11.0800	---	---	23.0000	34.4000	1.0800	---
WQ0561	1982	---	---	---	---	---	---	---	---	---	7.0500	---	---	35.1667	78.2500	1.9850	---
WQ0561	1983	---	---	---	---	---	---	---	---	---	10.4786	---	---	19.1429	32.9643	0.9821	---
WQ0561	1984	---	---	---	---	---	---	---	---	---	7.15 Winter	---	---	25 Winter	9.25 Winte	1.05 Winter	---
WQ0561	1985																
WQ0561	1986																
WQ0561	1987	---	---	174.5000	---	---	282.5000	75.0000	0.1150	---	10.3000	---	---	11.6500	31.3000	1.0750	0.8500
WQ0561	1988	---	---	183.0000	---	---	285.3333	69.3333	0.1233	---	10.9000	---	---	11.0667	30.5000	0.9833	0.7667
WQ0561	1989	---	---	230.6667	---	---	380.3333	86.6667	0.1333	---	7.7333	---	36.0000	15.1667	25.8333	1.1500	1.0000
WQ0561	1990	---	---	220.3333	---	---	346.0000	91.3333	0.1367	---	6.3667	---	---	17.8333	38.9167	1.2833	1.1167
WQ0561	1991	---	---	199.6667	---	---	331.0000	76.6667	0.1400	---	8.0333	---	---	12.8333	38.6667	1.4167	1.1000
WQ0561	1992	---	---	213.0000	---	---	339.3333	81.6667	0.1267	---	6.3000	---	60.3333	15.3333	46.3333	1.6167	1.4467
WQ0561	1993	---	---	196.0000	---	---	319.0000	97.6667	0.1167	---	10.3000	---	54.1667	13.1667	41.3333	1.4567	1.1433
WQ0561	1994	---	---	215.2500	---	---	332.2500	95.0000	0.1233	---	8.2500	---	58.4000	17.5333	42.5333	1.4500	---
WQ0561	1995	---	---	188.6667	---	---	296.0000	86.6667	0.1000	0.1000	9.8667	---	48.6000	11.7333	36.8667	0.8667	---
WQ0561	1996	---	---	164.0000	---	---	254.3333	69.3333	---	0.0967	9.4333	---	51.9667	14.2000	37.7667	0.8100	---
WQ0561	1997	8.6000	8.9000	179.3333	180.0000	188.0000	294.0000	70.6667	---	0.0933	8.4000	---	52.1667	13.2667	38.9000	0.6600	---
WQ0561	1998	9.7333	9.6000	195.0000	222.0000	198.0000	306.6667	60.6667	---	0.0500	8.2667	---	50.0000	14.6667	35.3333	1.0667	---
WQ0561	1999	9.0400	---	---	190.3333	---	301.3333	71.3333	---	---	6.8000	---	48.0000	13.0000	35.0000	0.9000	---
WQ0561	2000	9.9433	---	---	213.6667	---	340.6667	74.0000	---	---	3.9667	---	50.6667	15.3333	35.3333	1.0667	---
WQ0561	2001	8.8233	---	---	175.3333	---	289.3333	75.2000	---	0.0967	6.0667	---	57.3333	17.3333	39.6667	1.2000	---
WQ0561	Average	9.2280	9.2500	196.6181	196.2667	193.0000	313.2056	78.7467	0.1239	0.0873	8.2496	NA	51.6030	16.6540	39.9551	1.1631	1.0605
WQ0561	Std. Dev.	0.5832	0.4950	20.1136	20.6336	7.0711	31.9993	10.6649	0.0124	0.0210	1.9432	NA	6.5664	5.8176	11.5879	0.3141	0.2217
Fairford River																	
WQ0364	1979	---	---	---	---	---	---	---	---	---	12.2091	---	---	24.5417	44.0417	1.0167	---
WQ0364	1980	---	---	---	---	---	---	---	---	---	11.5083	---	---	24.8889	39.1111	1.1000	---
WQ0364	1981	---	---	---	---	---	---	---	---	---	10.7545	---	---	20.2917	40.5833	1.0250	---
WQ0364	1982	---	---	---	---	---	---	---	---	---	11.7583	---	---	24.6667	40.6667	1.1167	---
WQ0364	1983	---	---	---	---	---	---	---	---	---	10.7727	---	---	21.8000	42.7778	1.1636	---
WQ0364	1984	---	---	---	---	---	---	---	---	---	11.7500	---	---	22.8750	41.1000	1.2800	---
WQ0364	1985	---	---	---	---	---	---	---	---	---	13.1 Winter	---	---	21.8 Winter	49.5 Winter	1.25 Winter	---
WQ0364	1985-																
WQ0364	1993																
WQ0364	1994	---	---	258 Aug.	---	---	397 Aug.	129 Aug.	---	---	8.7 Aug.	---	---	---	---	1.86 Aug.	---
WQ0364	Average	NA	NA	258.0000	NA	NA	397.0000	129.0000	NA	NA	11.3191	NA	NA	22.9806	42.5401	1.2265	NA
WQ0364	Std. Dev	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3014	NA	NA	1.7772	3.4622	0.2729	NA

Table 6. (Continued).

Site	Average for Year of	Total Kjeldahl Nitrogen Particulate mg/L	Nitrate-Nitrite Nitrogen mg/L	Total Ammonia Nitrogen mg/L	Total Phosphorus as P mg/L	Total Particulate Phosphorus mg/L	Total Dissolved Phosphorus mg/L	Ortho Phosphorus mg/L	Chlorophyll a ug/L	Arsenic Extractable mg/L	Arsenic Total mg/L	Cadmium Extractable or Total mg/L	Copper Extractable or Total mg/L	Lead Extractable or Total mg/L	Nickel Extractable or Total mg/L	Zinc Extractable or Total mg/L	Chromium Hexavalent mg/L
Assiniboine Diversion est.																	
WQ0014	1971	---	0.6000	---	0.1200	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1972	---	0.1000	---	0.1000	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1973																
WQ0014	1974	---	0.5000	0.0500	0.3700	---	---	0.1900	---	---	---	---	---	---	---	---	---
WQ0014	1975	---	0.3800	0.1000	0.2000	---	---	0.1300	---	0.0400	---	0.0050	0.0050	0.0100	---	---	---
WQ0014	1976	---	0.0200	0.0500	0.1100	---	---	0.1100	---	0.0400	---	0.0050	0.0050	0.0100	---	---	---
WQ0014	1977																
WQ0391	1978	---	1.1000	---	0.5000	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1979	---	0.7567	---	0.4967	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1980																
WQ0391	1981																
WQ0391	1982	---	0.4300	0.0900	0.3200	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1983	---	0.2350	0.0900	0.2800	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1984																
WQ0014	1985	---	0.06 Oct.	---	0.08 Oct.	---	---	---	---	---	0.003 Oct.	0.001 Oct.	0.01 Oct.	0.005 Oct.	0.005 Oct.	0.01 Oct.	---
WQ0014	1986	0.2750	0.4250	0.1000	0.2550	0.0800	0.1750	---	---	---	0.0070	0.0010	0.0100	0.0070	0.0060	0.0300	0.0200
WQ0014	1987	0.2000	1.2000	0.3600	---	---	---	---	---	---	0.0190	0.0010	0.0200	0.0070	0.0060	0.0600	0.0200
WQ0014	1988																
WQ0014	1989	---	---	---	---	---	---	---	---	---	0.0030	0.0010	0.0300	0.0050	0.0080	0.0200	0.0200
WQ0014	1990																
WQ0014	1991																
WQ0014	1992	0.4850	0.4700	0.1235	0.2585	0.1160	0.1425	---	---	---	0.0050	0.0010	0.0100	0.0035	0.0075	0.0100	0.0200
WQ0014	1993	0.2000	0.0100	0.0200	0.1070	0.0780	0.0290	---	---	---	0.0070	0.0010	0.0100	0.0020	0.0070	0.0100	0.0200
WQ0014	1994	0.3433	0.0100	0.0200	0.1847	0.0827	0.1020	---	---	---	0.0070	0.0010	0.0100	0.0020	0.0050	0.0100	0.0200
WQ0014	1995	0.5250	0.5700	0.2105	0.4400	0.1730	0.2670	---	---	---	0.0055	0.0010	0.0100	0.0035	0.0125	0.0250	0.0200
WQ0014	1996	0.3850	0.3233	0.0413	0.2220	0.1080	0.1370	---	---	---	0.0040	0.0010	0.0100	0.0020	0.0050	0.0100	0.0200
WQ0014	1997	---	0.6450	0.1440	0.3630	0.2360	0.1270	---	---	---	0.0040	0.0005	0.0050	0.0020	0.0080	0.0100	0.0200
WQ0014	1998	---	1.2300	0.2500	0.9540	0.2690	0.6850	---	7.0000	---	0.0130	0.0005	0.0290	0.0100	0.0390	0.0900	0.0200
WQ0014	1999	---	0.4967	0.1633	0.2912	0.1340	0.1572	---	4.0000	---	0.0083	0.0002	0.0120	0.0056	0.0160	0.0400	0.0200
WQ0014	2000																
WQ0014	2001	---	0.6400	0.1700	0.4703	0.3647	0.1063	---	21.4667	---	0.0059	0.0004	0.0094	0.0042	0.0112	0.0245	0.0350
Diversion	Average	0.3448	0.4858	0.1239	0.3061	0.1641	0.1928	0.1433	10.8222	0.0400	0.0071	0.0014	0.0124	0.0053	0.0105	0.0269	0.0213
Diversion	Std. Dev.	0.1295	0.3668	0.0917	0.2041	0.0966	0.1831	0.0416	9.3396	0.0000	0.0045	0.0015	0.0078	0.0030	0.0092	0.0242	0.0043
Whitemud River																	
WQ0197	1973	---	0.1667	0.1200	0.1067	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974	---	0.9800	0.0800	0.1188	---	---	0.0500	---	---	---	0.0100	0.0100	0.0150	0.0300	0.0200	---
WQ0197	1975	---	0.2200	0.1000	0.0725	---	---	0.0300	---	0.0400	---	0.0050	0.0063	0.0100	---	0.0070	---
WQ0197	1976	---	0.0825	0.1375	0.0750	---	---	0.0325	---	0.0400	---	0.0050	0.0050	0.0100	---	---	---
WQ0197	1977	---	0.1025	0.1925	0.0925	---	---	0.0500	---	0.0145	---	0.0050	0.0063	0.0063	---	---	---
WQ0197	1978	---	0.2217	---	0.0742	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979	---	0.2367	---	0.0842	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980	---	0.1292	0.0700	0.0727	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981	---	0.0908	---	0.0850	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982	---	0.1733	---	0.0908	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983	---	0.1383	---	0.0833	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1984	---	0.08 Jan.	---	0.05 Jan.	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1985																
WQ0197	1986	---	0.0450	0.0725	0.0625	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987	---	0.1800	0.1028	0.0933	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988	---	0.0556	0.2039	0.0837	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989	---	0.0525	0.1413	0.0894	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990	---	0.0788	0.1863	0.0694	---	---	---	---	---	---	---	---	---	---	---	---

Table 6. (Continued).

Site	Average for Year of	Total Kjeldahl Nitrogen Particulate mg/L	Nitrate-Nitrite Nitrogen mg/L	Total Ammonia Nitrogen mg/L	Total Phosphorus as P mg/L	Total Particulate Phosphorus mg/L	Total Dissolved Phosphorus mg/L	Ortho Phosphorus mg/L	Chlorophyll a ug/L	Arsenic Extractable mg/L	Arsenic Total mg/L	Cadmium Extractable or Total mg/L	Copper Extractable or Total mg/L	Lead Extractable or Total mg/L	Nickel Extractable or Total mg/L	Zinc Extractable or Total mg/L	Chromium Hexavalent mg/L
WQ0197	1991	---	0.0967	0.1267	0.0780	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1992	0.5900	0.0100	0.0290	0.0490	0.0345	0.0145	---	---	---	0.0065	0.0010	0.0100	0.0020	0.0050	0.0100	0.0200
WQ0197	1993	0.2000	0.1050	0.1200	0.0873	0.0445	0.0428	---	---	---	0.0070	0.0010	0.0100	0.0020	0.0050	0.0100	0.0200
WQ0197	1994	0.2000	0.0500	0.1248	0.0918	0.0663	0.0255	---	---	---	0.0098	0.0010	0.0100	0.0020	0.0050	0.0100	0.0200
WQ0197	1995	0.2450	0.3900	0.1688	0.1283	0.0938	0.0345	---	---	---	0.0065	0.0010	0.0100	0.0020	0.0050	0.0125	0.0200
WQ0197	1996	0.2000	0.2071	0.0720	0.0980	0.0661	0.0133	---	5.2500	---	0.0045	0.0010	0.0088	0.0018	0.0050	0.0100	0.0200
WQ0197	1997	---	0.1900	0.1054	0.0919	0.0647	0.0260	---	3.1250	---	0.0093	0.0005	0.0080	0.0013	0.0025	---	0.0200
WQ0197	1998	---	0.3764	0.0714	0.1764	0.0995	0.0520	---	6.2500	---	0.0103	0.0004	0.0038	0.0011	0.0063	0.0100	0.0200
WQ0197	1999	---	0.2033	0.0783	0.1491	0.0727	0.0434	---	2.2500	---	0.0054	0.0002	0.0017	0.0008	0.0033	0.0200	0.0167
WQ0197	2000	---	0.2136	0.0886	0.1131	0.0661	0.0471	---	3.4000	---	0.0086	0.0002	0.0020	0.0008	0.0033	0.0200	0.0100
WQ0197	2001	---	0.4136	0.1264	0.1827	0.0951	0.0876	---	8.5800	---	0.0052	0.0001	0.0022	0.0009	0.0026	0.0100	0.0250
WQ0197	Average	0.2870	0.1889	0.1144	0.0946	0.0703	0.0387	0.0406	4.8092	0.0315	0.0073	0.0022	0.0067	0.0040	0.0066	0.0127	0.0192
WQ0197	Std. Dev.	0.1705	0.1867	0.0449	0.0322	0.0212	0.0218	0.0109	2.3606	0.0147	0.0020	0.0029	0.0033	0.0045	0.0078	0.0049	0.0038
Waterhen River																	
WQ0561	1981	---	0.0100	---	0.0300	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982	---	0.0160	---	0.0470	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1983	---	0.0129	---	0.0321	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1984	---	0.035 Winter	---	0.0125 Winte	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1985																
WQ0561	1986																
WQ0561	1987	0.2250	0.0150	0.0400	0.0350	0.0100	0.0250	---	---	---	0.0020	0.0010	0.0250	0.0050	0.0050	0.0200	0.0200
WQ0561	1988	0.2500	0.0133	0.0267	0.0300	0.0092	0.0133	---	---	---	0.0020	0.0010	0.0433	0.0060	0.0057	0.0300	0.0200
WQ0561	1989	0.1500	0.0233	0.0650	0.0267	0.0133	0.0175	---	---	---	0.0020	0.0010	0.0133	0.0200	0.0050	0.0100	0.0200
WQ0561	1990	0.1667	0.0100	0.1833	0.0300	0.0133	0.0167	---	---	---	0.0013	0.0010	0.0100	0.0030	0.0050	0.0100	0.0200
WQ0561	1991	0.3167	0.0100	0.1650	0.0347	0.0103	0.0243	---	---	---	0.0013	0.0010	0.0100	0.0023	0.0050	0.0100	0.0200
WQ0561	1992	0.2033	0.0100	0.3043	0.0307	0.0117	0.0217	---	---	---	0.0010	0.0010	0.0100	0.0020	0.0050	0.0100	0.0200
WQ0561	1993	0.3167	0.0100	0.2317	0.0310	0.0103	0.0207	---	---	---	0.0010	0.0010	0.0167	0.0020	0.0053	0.0100	0.0200
WQ0561	1994	---	0.0100	0.0508	0.0233	0.0098	0.0123	---	5.0000	---	0.0010	0.0010	0.0100	0.0020	0.0050	0.0100	0.0200
WQ0561	1995	---	0.0167	0.0360	0.0177	0.0097	0.0080	---	---	---	0.0010	0.0010	0.0100	0.0020	0.0050	0.0100	0.0200
WQ0561	1996	---	0.0267	0.0277	0.0387	0.0163	0.0223	---	---	---	0.0010	0.0010	0.0117	0.0017	0.0050	0.0100	0.0200
WQ0561	1997	---	0.0400	0.0347	0.0293	0.0180	0.0113	---	---	---	0.0010	0.0005	0.0090	0.0010	0.0020	0.0100	0.0200
WQ0561	1998	---	0.0133	0.0233	0.0280	0.0107	0.0173	---	---	---	0.0014	0.0003	0.0023	0.0007	0.0020	0.0133	0.0200
WQ0561	1999	---	0.0100	0.0133	0.0220	0.0117	0.0103	---	---	---	0.0020	0.0002	0.0010	0.0005	0.0020	0.0200	0.0200
WQ0561	2000	---	0.0100	0.0133	0.0247	0.0130	0.0117	---	---	---	0.0024	0.0002	0.0013	0.0007	0.0020	0.0233	0.0100
WQ0561	2001	---	0.0333	0.3333	0.0303	0.0183	0.0120	---	2.9000	---	0.0016	---	0.0010	0.0001	0.0009	0.0010	0.0300
WQ0561	Average	0.2326	0.0171	0.1032	0.0291	0.0124	0.0163	NA	3.9500	NA	0.0015	0.0008	0.0116	0.0033	0.0040	0.0132	0.0200
WQ0561	Std. Dev.	0.0665	0.0097	0.1107	0.0075	0.0030	0.0055	NA	1.4849	NA	0.0005	0.0003	0.0109	0.0049	0.0017	0.0072	0.0038
Fairford River																	
WQ0364	1979	---	0.0983	---	0.0467	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980	---	0.0500	---	0.0292	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981	---	0.0267	---	0.0181	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982	---	0.0108	---	0.0312	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983	---	0.0236	---	0.0309	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1984	---	0.0185	---	0.0275	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1985	---	0.05 Winter	---	0.011 Winter	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1985-																
WQ0364	1993																
WQ0364	1994	---	0.01 Aug.	0.020 Aug.	0.048 Aug.	0.008 Aug.	---	---	4.0 Aug.	---	0.001 Aug.	0.001 Aug.	0.01 Aug.	0.002 Aug.	0.005 Aug.	0.01 Aug.	---
WQ0364	Average	NA	0.0360	0.0200	0.0303	0.0080	NA	NA	4.0000	NA	0.0010	0.0010	0.0100	0.0020	0.0050	0.0100	NA
WQ0364	Std. Dev.	NA	0.0296	NA	0.0126	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6. (Continued).

Site	Average for Year of	Chromium Total mg/L	Aluminum Extractable mg/L	Aluminum Total mg/L	Aluminum Dissolved mg/L	Antimony Total mg/L	Barium Total mg/L	Beryllium Total mg/L	Bismuth Total mg/L	Cobalt Total mg/L	Cesium Total mg/L	Lithium Total mg/L	Molybdenum Total mg/L	Phosphate Total as PO_4 mg/L	Rubidium Total mg/L	Selenium Total mg/L	Silicon Total mg/L	Silver Total mg/L	Strontium Total mg/L	Thallium Total mg/L	Tin Total mg/L
Assiniboine Diversion est																					
WQ0014	1971	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1972	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1973																				
WQ0014	1974	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1975	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1976	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1977																				
WQ0391	1978	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1979	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1980																				
WQ0391	1981																				
WQ0391	1982	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1983	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1984																				
WQ0014	1985	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1986	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1987	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1988																				
WQ0014	1989	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1990																				
WQ0014	1991																				
WQ0014	1992	---	0.2245	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1993	---	0.1500	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1994	---	0.3817	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1995	---	0.8025	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1996	---	0.8670	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1997	---	0.4060	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1998	---	2.8200	30.0000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1999	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	2000																				
WQ0014	2001	0.0051	---	2.6200	0.2750	0.0005	0.1530	0.0003	0.0002	0.0033	0.0008	0.0485	0.0022	1.1550	0.0084	0.0005	24.6000	0.0000	0.2395	0.0001	0.0013
Diversion	Average	0.0051	0.8074	16.3100	0.2750	0.0005	0.1530	0.0003	0.0002	0.0033	0.0008	0.0485	0.0022	1.1550	0.0084	0.0005	24.6000	0.0000	0.2395	0.0001	0.0013
Diversion	Std. Dev.	#DIV/0!	0.9281	19.3606	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Whitemud River														---			---				
WQ0197	1973	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1975	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1976	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1977	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1984	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1985																				
WQ0197	1986	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 6. (Continued).

Site	Average for Year of	Chromium Total mg/L	Aluminum Extractable mg/L	Aluminum Total mg/L	Aluminum Dissolved mg/L	Antimony Total mg/L	Barium Total mg/L	Beryllium Total mg/L	Bismuth Total mg/L	Cobalt Total mg/L	Cesium Total mg/L	Lithium Total mg/L	Molybdenum Total mg/L	Phosphate Total as PO_4 mg/L	Rubidium Total mg/L	Selenium Total mg/L	Silicon Total mg/L	Silver Total mg/L	Strontium Total mg/L	Thallium Total mg/L	Tin Total mg/L
WQ0197	1991	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1992	---	0.1030	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1993	---	0.2305	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1994	---	0.2215	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1995	---	0.2808	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1996	---	0.1920	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1997	---	0.3500	0.4500	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1998	---	0.4450	3.9800	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1999	0.0020	---	0.1500	---	0.0010	0.1450	0.0010	0.0001	0.0002	0.0001	0.0410	0.0011	---	0.0029	0.0030	---	0.0034	0.2560	0.0001	0.0005
WQ0197	2000	0.0028	---	0.9025	---	0.0010	0.1660	0.0010	0.0002	0.0005	0.0001	0.0438	0.0015	---	0.0041	0.0023	---	0.0009	0.2920	0.0001	0.0008
WQ0197	2001	0.0012	---	0.3675	0.0823	0.0006	0.1438	0.0004	0.0002	0.0006	0.0001	0.0355	0.0013	0.6833	0.0028	0.0009	16.2333	0.0002	0.2595	0.0000	0.0006
WQ0197	Average	0.0020	0.2604	1.1700	0.0823	0.0009	0.1516	0.0008	0.0001	0.0004	0.0001	0.0401	0.0013	0.6833	0.0033	0.0020	16.2333	0.0015	0.2692	0.0001	0.0006
WQ0197	Std. Dev.	0.0008	0.1113	1.5946	NA	0.0003	0.0125	0.0003	0.0000	0.0002	0.0000	0.0042	0.0002	NA	0.0007	0.0011	NA	0.0017	0.0199	0.0000	0.0002
Waterhen River														---			---				
WQ0561	1981	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1983	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1984	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1985																				
WQ0561	1986																				
WQ0561	1987	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1988	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1989	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1990	---	0.0250	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1991	---	0.0163	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1992	---	0.0247	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1993	---	0.0203	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1994	---	0.0130	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1995	---	0.0260	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1996	---	0.0197	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1997	---	0.0133	0.0300	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1998	---	0.0200	0.0300	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1999	0.0020	---	0.0300	---	0.0010	0.0342	0.0010	0.0001	0.0002	0.0001	0.0340	0.0020	---	0.0045	0.0030	---	0.0010	0.2780	0.0001	0.0006
WQ0561	2000	0.0020	---	0.0900	---	0.0010	0.0346	0.0010	0.0001	0.0002	0.0001	0.0300	0.0021	---	0.0045	0.0033	---	0.0004	0.2997	0.0001	0.0013
WQ0561	2001	0.0007	---	0.0130	0.0077	0.0004	0.0387	0.0002	0.0002	0.0002	0.0001	0.0317	0.0020	0.0887	0.0040	0.0004	8.9200	---	0.2933	---	0.0004
WQ0561	Average	0.0016	0.0198	0.0386	0.0077	0.0008	0.0358	0.0007	0.0001	0.0002	0.0001	0.0319	0.0020	0.0887	0.0043	0.0022	8.9200	0.0007	0.2903	0.0001	0.0008
WQ0561	Std. Dev.	0.0008	0.0049	0.0297	NA	0.0003	0.0025	0.0005	0.0001	0.0000	0.0000	0.0020	0.0001	#DIV/0!	0.0003	0.0016	NA	0.0004	0.0111	0.0000	0.0004
Fairford River														---							
WQ0364	1979	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1984	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1985	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1985-																				
WQ0364	1993																				
WQ0364	1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	Average	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WQ0364	Std. Dev.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6. (Continued).

Site	Average for Year of	Tellurium Total mg/L	Thorium Total mg/L	Titanium Total mg/L	Uranium Total mg/L	Vanadium Total mg/L	Tungsten Total mg/L	Zirconium Total mg/L	2,4-D ug/L	Atrazine ug/L	Bromoxynil ug/L	Dicamba ug/L	Glyphosate ug/L	HCH (Gamma) (Lindane) ug/L	MCPA ug/L	Simazine ug/L	Trifluralin ug/L	Pesticides Other ug/L	PCP Pentachlorophenol ug/L	Phenolics Total mg/L
Assiniboine Diversion est																				
WQ0014	1971	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0014	1972	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0014	1973																			
WQ0014	1974	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0014	1975	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0014	1976	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0014	1977																			
WQ0391	1978	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0391	1979	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0391	1980																			
WQ0391	1981																			
WQ0391	1982	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0391	1983	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0391	1984																			
WQ0014	1985	---	---	---	---	---	---	---	0.1 Oct	---	0.1 Oct	---	---	0.001 Oct	---	---	0.006 Oct	See Appendix 3	---	---
WQ0014	1986	---	---	---	---	---	---	---	0.3000	---	0.1000	---	---	0.0010	---	---	0.0060	See Appendix 3	---	---
WQ0014	1987	---	---	---	---	---	---	---	0.0500	---	0.0100	---	---	0.0010	---	---	0.0060	See Appendix 3	---	---
WQ0014	1988																			
WQ0014	1989	---	---	---	---	---	---	---	0.0500	---	0.0100	0.0600	---	0.0200	---	---	0.0300	See Appendix 3	---	---
WQ0014	1990																			
WQ0014	1991																			
WQ0014	1992	---	---	---	---	---	---	---	0.0750	0.5000	0.0100	0.0200	---	0.0200	10.0000	0.5000	0.0300	See Appendix 3	---	---
WQ0014	1993	---	---	---	---	---	---	---	0.0500	0.5000	0.0100	0.0200	---	0.0200	10.0000	0.5000	0.0300	See Appendix 3	---	---
WQ0014	1994	---	---	---	---	---	---	---	0.0500	0.5000	0.0100	0.0200	---	0.0200	10.0000	0.5000	0.0300	See Appendix 3	---	---
WQ0014	1995	---	---	---	---	---	---	---	0.1100	0.5000	0.0100	0.0200	---	0.0200	10.0000	0.5000	0.0300	See Appendix 3	---	---
WQ0014	1996	---	---	---	---	---	---	---	0.0500	0.5000	0.0100	0.0200	---	0.0200	10.0000	0.5000	0.0300	See Appendix 3	---	---
WQ0014	1997	---	---	---	---	---	---	---	0.0500	0.5000	0.0100	0.0200	---	0.0200	10.0000	0.5000	0.0300	See Appendix 3	---	---
WQ0014	1998	---	---	---	---	---	---	---	0.0600	0.1000	0.0200	0.0200	---	0.0200	0.0500	0.1000	0.0300	See Appendix 3	0.0200	
WQ0014	1999	---	---	---	---	---	---	---	0.1200	0.1000	0.0200	0.0200	---	0.0200	0.0500	0.1000	0.0300	See Appendix 3	0.0200	0.0045
WQ0014	2000																			
WQ0014	2001	0.0002	0.0013	0.0630	0.0035	0.0125	---	0.0070	0.0500	0.1000	0.0200	0.0200	0.0020	0.0100	0.0500	0.1000	0.0300	See Appendix 3	0.0200	0.0013
Diversion	Average	0.0002	0.0013	0.0630	0.0035	0.0125	NA	0.0070	0.0858	0.3667	0.0262	0.0240	0.0020	0.0148	6.6833	0.3667	0.0245	NA	0.0200	0.0029
Diversion	Std. Dev.	NA	NA	NA	NA	NA	NA	NA	0.0693	0.2000	0.0331	0.0126	NA	0.0084	4.9750	0.2000	0.0105	NA	0.0000	0.0022
Whitemud River			---																	
WQ0197	1973	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0197	1974	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0197	1975	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0197	1976	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0197	1977	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0197	1978	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0197	1979	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0197	1980	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0197	1981	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0197	1982	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0197	1983	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0197	1984	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0197	1985																	See Appendix 3		
WQ0197	1986	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0197	1987	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0197	1988	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0197	1989	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0197	1990	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---

Table 6. (Continued).

Site	Average for Year of	Tellurium Total mg/L	Thorium Total mg/L	Titanium Total mg/L	Uranium Total mg/L	Vanadium Total mg/L	Tungsten Total mg/L	Zirconium Total mg/L	2,4-D ug/L	Atrazine ug/L	Bromoxynil ug/L	Dicamba ug/L	Glyphosate ug/L	HCH (Gamma) (Lindane) ug/L	MCPA ug/L	Simazine ug/L	Trifluralin ug/L	Pesticides Other ug/L	PCP Pentachlorophenol ug/L	Phenolics Total mg/L
WQ0197	1991	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0197	1992	---	---	---	---	---	---	---	0.0500	0.5000	0.0100	0.0200	---	0.0200	10.0000	0.5000	0.0300	See Appendix 3	---	---
WQ0197	1993	---	---	---	---	---	---	---	0.2850	0.5000	0.0100	0.0200	---	0.0200	10.0000	0.5000	0.0300	See Appendix 3	---	---
WQ0197	1994	---	---	---	---	---	---	---	0.0875	0.5000	0.0100	0.0200	---	0.0200	10.0000	0.5000	0.0300	See Appendix 3	---	---
WQ0197	1995	---	---	---	---	---	---	---	0.0500	0.5000	0.0100	0.0200	---	0.0200	10.0000	0.5000	0.0300	See Appendix 3	---	---
WQ0197	1996	---	---	---	---	---	---	---	0.0575	0.5000	0.0100	0.0200	---	0.0200	10.0000	0.5000	0.0300	See Appendix 3	---	---
WQ0197	1997	---	---	---	---	---	---	---	0.0800	0.3000	0.0150	0.0200	---	0.0200	5.0275	0.3000	0.0300	See Appendix 3	0.0200	---
WQ0197	1998	---	---	---	---	---	---	---	0.0500	0.1000	0.0300	0.0200	---	0.0200	0.0725	0.1000	0.0300	See Appendix 3	0.0200	---
WQ0197	1999	0.0020	---	0.0057	0.0010	0.0010	0.0002	0.0004	0.0567	0.1000	0.0200	0.0200	---	0.0233	0.0500	0.1000	0.0300	See Appendix 3	0.0200	---
WQ0197	2000	0.0010	---	0.0282	0.0024	0.0033	0.0003	0.0014	0.1250	0.1000	0.0200	0.0200	1.2538	0.0200	0.0500	0.1000	0.0300	See Appendix 3	0.0225	---
WQ0197	2001	0.0005	0.0003	0.0133	0.0024	0.0027	0.0002	0.0034	0.1625	0.1000	0.0200	0.0200	0.0028	0.0125	0.0500	0.1000	0.0300	See Appendix 3	0.0200	---
WQ0197	Average	0.0012	0.0003	0.0157	0.0020	0.0023	0.0002	0.0017	0.1004	0.3200	0.0155	0.0200	0.6283	0.0196	5.5250	0.3200	0.0300	NA	0.0205	NA
WQ0197	Std. Dev.	0.0008	NA	0.0115	0.0008	0.0012	0.0000	0.0015	0.0749	0.1989	0.0069	0.0000	0.8846	0.0027	4.9445	0.1989	0.0000	NA	0.0011	NA
Waterhen River			---																	
WQ0561	1981	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0561	1982	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0561	1983	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0561	1984	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0561	1985																			
WQ0561	1986																			
WQ0561	1987	---	---	---	---	---	---	---	0.0500	---	0.0100	---	---	0.0100	---	---	0.0100	See Appendix 3	---	---
WQ0561	1988	---	---	---	---	---	---	---	0.0533	---	0.0100	---	---	0.0133	---	0.5000	0.0167	See Appendix 3	---	---
WQ0561	1989	---	---	---	---	---	---	---	0.0867	---	0.0100	---	---	0.0200	---	0.5000	0.0300	See Appendix 3	---	---
WQ0561	1990	---	---	---	---	---	---	---	0.0500	0.5000	0.0100	0.0200	---	0.0200	10.0000	0.5000	0.0300	See Appendix 3	---	---
WQ0561	1991	---	---	---	---	---	---	---	0.0700	0.5000	0.0100	0.0200	---	0.0200	10.0000	0.5000	0.0300	See Appendix 3	---	---
WQ0561	1992	---	---	---	---	---	---	---	0.0767	0.5000	0.0100	0.0200	---	0.0200	10.0000	0.5000	0.0300	See Appendix 3	---	---
WQ0561	1993	---	---	---	---	---	---	---	0.0500	0.5000	0.0100	0.0200	---	0.0200	10.0000	0.5000	0.0300	See Appendix 3	---	---
WQ0561	1994	---	---	---	---	---	---	---	0.0500	0.5000	0.0100	0.0200	---	0.0200	10.0000	0.5000	0.0300	See Appendix 3	---	---
WQ0561	1995	---	---	---	---	---	---	---	0.0500	0.5000	0.0100	0.0200	---	0.0200	10.0000	0.5000	0.0300	See Appendix 3	---	---
WQ0561	1996	---	---	---	---	---	---	---	0.0600	0.5000	0.0100	0.0200	---	0.0200	10.0000	0.5000	0.0300	See Appendix 3	---	---
WQ0561	1997	---	---	---	---	---	---	---	0.0500	0.2333	0.0167	0.0200	---	0.0200	3.3667	0.2333	0.0300	See Appendix 3	0.0200	---
WQ0561	1998	---	---	---	---	---	---	---	0.0500	0.1000	0.0200	0.0200	---	0.0200	0.0500	0.1000	0.0300	See Appendix 3	0.0200	---
WQ0561	1999	0.0010	---	0.0018	0.0012	0.0010	0.0002	0.0002	0.0500	0.1000	0.0200	0.0200	---	0.0200	0.0500	0.1000	0.0300	See Appendix 3	0.0200	---
WQ0561	2000	0.0010	---	0.0059	0.0013	0.0013	0.0002	0.0005	0.0500	0.1000	0.0200	0.0200	---	0.0200	0.0500	0.1000	0.0300	See Appendix 3	0.0200	---
WQ0561	2001	0.0002	0.0002	0.0008	0.0012	0.0014	---	0.0020	0.0500	0.1000	0.0200	0.0200	---	0.0100	0.0500	0.1000	0.0300	See Appendix 3	0.0333	---
WQ0561	Average	0.0007	0.0002	0.0028	0.0012	0.0012	0.0002	0.0009	0.0564	0.3444	0.0131	0.0200	NA	0.0182	6.1306	0.3667	0.0278	See Appendix 3	0.0227	NA
WQ0561	Std. Dev.	0.0004	NA	0.0027	0.0001	0.0002	0.0000	0.0010	0.0118	0.1956	0.0046	0.0000	NA	0.0038	4.8649	0.1886	0.0060	See Appendix 3	0.0060	NA
Fairford River			---																	
WQ0364	1979	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0364	1980	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0364	1981	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0364	1982	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0364	1983	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0364	1984	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0364	1985	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0364	1985-																			
WQ0364	1993																			
WQ0364	1994	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	See Appendix 3	---	---
WQ0364	Average	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WQ0364	Std. Dev.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 7. Percentage contribution of suspended and dissolved solids, conductivity, principal nutrients and ions, and pH from the Assiniboine River Diversion, Whitemud River, and Waterhen River from 1981 through 2001. The major contributing streams are highlighted.

Stream[1]/ Relative Influence	Average for Year of	Flow from Inflowing Rivers %	Total Suspended Solids %	Total Phosphorus %	Total Kjeldahl Nitrogen %	Nitrate-Nitrite Nitrogen %	Total Ammonia Nitrogen %	Specific Conductivity %	Total Dissolved Solids %	Sodium %	Chloride %	Sulphate %	pH Lab. %
Diversion	1981	0.0%	0.0%	0.0%	0.0%	0.0%	NA	0.0%	NA	NA	NA	NA	0.0%
Whitemud	1981	6.5%	16.2%	16.4%	5.3%	38.6%	NA	2.8%	NA	NA	NA	NA	6.2%
Waterhen	1981	**93.5%**	**83.8%**	**83.6%**	**94.7%**	**61.4%**	NA	**97.2%**	NA	NA	NA	NA	**93.8%**
Diversion	1982	3.0%	30.9%	16.1%	1.8%	29.9%	NA	0.6%	NA	NA	NA	NA	3.0%
Whitemud	1982	9.2%	13.7%	14.2%	4.7%	**37.3%**	NA	3.0%	NA	NA	NA	NA	9.1%
Waterhen	1982	**87.8%**	**55.4%**	**69.7%**	**93.5%**	32.8%	NA	**96.5%**	NA	NA	NA	NA	**87.9%**
Diversion	1983	10.4%	**62.2%**	**46.8%**	11.6%	**52.7%**	NA	4.9%	NA	NA	NA	NA	10.0%
Whitemud	1983	8.3%	9.1%	11.1%	7.5%	24.7%	NA	4.2%	NA	NA	NA	NA	7.9%
Waterhen	1983	**81.3%**	28.7%	42.1%	**80.9%**	22.6%	NA	**91.0%**	NA	NA	NA	NA	**82.0%**
Diversion	1984	0.0%	0.0%	0.0%	0.0%	0.0%	NA	0.0%	NA	NA	NA	NA	0.0%
Whitemud	1984	2.3%	2.1%	8.7%	3.3%	5.2%	NA	1.4%	NA	NA	NA	NA	2.3%
Waterhen	1984	**97.7%**	**97.9%**	**91.3%**	**96.7%**	**94.8%**	NA	**98.6%**	NA	NA	NA	NA	**97.7%**
Diversion	1985	1.8%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Whitemud	1985	3.4%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Waterhen	1985	**94.7%**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diversion	1986	3.7%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Whitemud	1986	9.1%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Waterhen	1986	**87.2%**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diversion	1987	5.1%	**82.7%**	NA	NA	NA	NA	NA	1.1%	NA	NA	NA	0.0%
Whitemud	1987	5.9%	1.2%	NA	NA	NA	NA	NA	3.3%	NA	NA	NA	5.9%
Waterhen	1987	**89.0%**	16.2%	NA	NA	NA	NA	NA	**95.7%**	NA	NA	NA	**94.1%**
Diversion	1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	NA	NA	NA	0.0%
Whitemud	1988	1.3%	1.4%	3.6%	1.3%	5.4%	9.4%	0.8%	0.9%	NA	NA	NA	1.3%
Waterhen	1988	**98.7%**	**98.6%**	**96.4%**	**98.7%**	**94.6%**	**90.6%**	**99.2%**	**99.1%**	NA	NA	NA	**98.7%**
Diversion	1989	0.7%	10.9%	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	NA	NA	NA	0.6%
Whitemud	1989	2.4%	3.0%	7.8%	2.1%	5.3%	5.2%	1.1%	1.2%	NA	NA	NA	2.4%
Waterhen	1989	**96.9%**	**86.0%**	**92.2%**	**97.9%**	**94.7%**	**94.8%**	**98.6%**	**98.5%**	NA	NA	NA	**97.0%**
Diversion	1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	NA	NA	NA	0.0%
Whitemud	1990	3.1%	5.5%	7.0%	2.3%	20.4%	3.2%	1.5%	1.5%	NA	NA	NA	3.1%
Waterhen	1990	**96.9%**	**94.5%**	**93.0%**	**97.7%**	**79.6%**	**96.8%**	**98.5%**	**98.5%**	NA	NA	NA	**96.9%**
Diversion	1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	NA	NA	NA	0.0%
Whitemud	1991	5.1%	7.0%	10.8%	3.3%	34.3%	4.0%	2.6%	2.9%	NA	NA	NA	5.0%
Waterhen	1991	**94.9%**	**93.0%**	**89.2%**	**96.7%**	**65.7%**	**96.0%**	**97.4%**	**97.1%**	NA	NA	NA	**95.0%**
Diversion	1992	12.4%	**83.1%**	**52.5%**	9.9%	**86.9%**	6.1%	5.6%	5.6%	2.5%	0.9%	18.6%	12.5%
Whitemud	1992	11.0%	1.4%	8.9%	6.7%	1.7%	1.2%	5.5%	5.6%	1.4%	1.0%	9.8%	11.0%
Waterhen	1992	**76.6%**	15.5%	38.6%	**83.4%**	11.5%	**92.7%**	**88.9%**	**88.7%**	**96.0%**	**98.1%**	**71.5%**	**76.5%**
Diversion	1993	0.4%	1.1%	1.2%	0.2%	0.2%	0.0%	0.2%	0.3%	0.1%	0.0%	0.7%	0.4%
Whitemud	1993	5.9%	7.8%	14.8%	3.7%	39.6%	3.1%	2.6%	3.0%	0.6%	0.4%	1.6%	5.7%
Waterhen	1993	**93.7%**	**91.1%**	**84.0%**	**96.1%**	**60.2%**	**96.8%**	**97.2%**	**96.7%**	**99.2%**	**99.5%**	**97.7%**	**94.0%**
Diversion	1994	8.0%	31.9%	38.6%	6.1%	7.1%	3.2%	4.8%	5.5%	3.0%	1.0%	16.7%	8.2%
Whitemud	1994	3.1%	2.6%	7.4%	2.2%	13.7%	7.6%	1.5%	1.6%	0.4%	0.3%	1.1%	2.9%
Waterhen	1994	**88.9%**	**65.6%**	**54.0%**	**91.7%**	**79.1%**	**89.2%**	**93.7%**	**92.9%**	**96.6%**	**98.7%**	**82.1%**	**88.9%**
Diversion	1995	34.7%	**94.9%**	**88.6%**	**47.4%**	**83.8%**	**68.7%**	17.4%	19.9%	8.9%	2.7%	47.1%	33.3%
Whitemud	1995	7.4%	1.7%	5.5%	8.0%	12.2%	11.7%	4.5%	5.5%	1.3%	1.0%	1.5%	7.0%
Waterhen	1995	**57.9%**	3.4%	5.9%	44.6%	4.1%	19.6%	**78.1%**	**74.6%**	**89.8%**	**96.3%**	**51.3%**	**59.7%**
Diversion	1996	17.5%	**76.1%**	**51.5%**	23.9%	**61.0%**	21.6%	12.6%	14.5%	7.2%	2.1%	42.6%	17.4%
Whitemud	1996	7.8%	3.2%	10.2%	9.6%	17.5%	16.8%	4.6%	5.2%	1.4%	1.0%	1.3%	7.6%
Waterhen	1996	**74.7%**	20.7%	38.3%	**66.5%**	21.5%	**61.6%**	**82.8%**	**80.3%**	**91.4%**	**96.9%**	**56.1%**	**75.0%**
Diversion	1997	15.8%	**78.4%**	**68.8%**	23.6%	**73.5%**	42.6%	7.4%	8.8%	3.4%	1.0%	24.1%	15.8%
Whitemud	1997	2.1%	1.2%	2.3%	2.7%	2.9%	4.1%	1.1%	1.4%	0.5%	0.2%	0.5%	2.1%
Waterhen	1997	**82.1%**	20.4%	28.9%	**73.7%**	23.6%	**53.2%**	**91.5%**	**89.8%**	**96.2%**	**98.8%**	**75.4%**	**82.1%**
Diversion	1998	1.7%	**56.7%**	32.2%	3.3%	**41.6%**	14.5%	0.5%	0.4%	0.2%	0.1%	2.8%	1.6%
Whitemud	1998	4.5%	10.9%	15.7%	5.3%	33.5%	10.9%	2.1%	2.4%	0.5%	0.4%	3.8%	4.4%
Waterhen	1998	**93.8%**	32.3%	**52.2%**	**91.4%**	24.9%	**74.6%**	**97.3%**	**97.1%**	**99.3%**	**99.5%**	**93.4%**	**94.0%**
Diversion	1999	28.1%	**90.9%**	**77.8%**	37.4%	**88.2%**	**77.4%**	17.5%	20.7%	6.6%	2.5%	39.0%	27.6%
Whitemud	1999	5.9%	4.6%	8.4%	8.1%	7.6%	7.8%	3.8%	4.7%	0.9%	0.5%	6.8%	5.8%
Waterhen	1999	**66.0%**	4.5%	13.8%	**54.5%**	4.2%	14.8%	**78.7%**	**74.5%**	**92.5%**	**97.0%**	**54.2%**	**66.6%**
Diversion	2000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Whitemud	2000	8.5%	26.8%	29.9%	10.4%	66.5%	38.2%	4.3%	5.2%	1.1%	0.6%	11.7%	8.3%
Waterhen	2000	**91.5%**	**73.2%**	**70.1%**	**89.6%**	**33.5%**	**61.8%**	**95.7%**	**94.8%**	**98.9%**	**99.4%**	**88.3%**	**91.7%**
Diversion	2001	25.4%	**89.5%**	**68.8%**	30.6%	**61.1%**	17.3%	17.1%	19.7%	10.1%	2.6%	**40.1%**	25.3%
Whitemud	2001	20.7%	8.2%	21.8%	31.6%	32.1%	10.5%	13.1%	15.1%	3.5%	2.2%	21.5%	20.4%
Waterhen	2001	**53.9%**	2.3%	9.4%	**37.8%**	6.8%	**72.2%**	**69.7%**	**65.3%**	**86.4%**	**95.2%**	38.3%	**54.2%**

[1] Diversion refers to Assiniboine Diversion

Table 8. Canadian Council of Ministers of the Environment water quality index (CCME WQI), water quality variables and objectives or guidelines (Williamson 2001,Williamson 1988) used to calculate CCME WQI values (CCME 2000).

Variables	Units	Objective* Value	Objective* Use
Fecal Coliform MF	Bacteria/100mL	200	Recreation
Ph	Ph Units	6.5-9.0	Aquatic Life
Specific Conductivity	uS/cm	1000	Greenhouse Irrigation
Total Suspended Solids	mg/L	25 (mid range)	Aquatic Life
Dissolved Oxygen	mg/L	5 (mid range)	Aquatic Life
Total Arsenic	mg/L	0.025	Drinking Water, Health
Dissolved Aluminum	mg/L	0.1 for pH >6.5	Aquatic Life
Total or Extractable Cadmium	mg/L	Calculation based on Hardness (7Q10)	Aquatic Life
Total or Extractable Copper	mg/L	Calculation based on Hardness (7Q10)	Aquatic Life
Total or Extractable Lead	mg/L	Calculation based on Hardness (7Q10)	Aquatic Life
Total or Extractable Nickel	mg/L	Calculation based on Hardness (7Q10)	Aquatic Life
Total or Extractable Zinc	mg/L	Calculation based on Hardness (7Q10)	Aquatic Life
Total or Extractable Manganese	mg/L	0.05	Drinking Water, Aesthetic
Total or Extractable Iron	mg/L	0.3	Drinking Water, Aesthetic
Total Ammonia as N	mg/L	Calculation based pH	Aquatic Life
Soluble or Dissolved Nitrate-Nitrite	mg/L	10	Drinking Water, Health
Total Phosphorus	mg/L	0.05 in Rivers or 0.025 in Lakes	Nuisance Plant Growth
Dicamba	ug/L	0.006 where detectable	Irrigation
Bromoxynil	ug/L	0.33	Irrigation
Simazine	ug/L	0.5	Irrigation
2,4 D	ug/L	4	Aquatic Life
Lindane	ug/L	0.08	Aquatic Life
Atrazine	ug/L	1.8	Aquatic Life
MCPA*	ug/L	0.025 where detectable	Irrigation
Trifluralin	ug/L	0.2	Aquatic Life

* The next higer objective for MCPA is for Aquatic Life at 2.6

CCME WQI (CCME 2001) Category ranges: 95-100 Excellent; 80-94 Good; 60-79 Fair; 45-59 Marginal; 0-44 Poor

CCME CWQI = $100-(((F_1^2+F_2^2+F_3^2)^{1/2})/1.732)$

Scope F_1 = ((Number of variables with an objective not met)/(Total number of variables))x100

Frequency F_2 = ((Number of samples with an objective not met)/(Total number of samples))x100

Amplitude $F_3 = ((nse/(0.01nse + 0.01))$

Where *nse* is the normalized sum of test excursions:

nse = (Sum of excursions$_i$)/(Total number of tests)

Where test values must not exceed the objective:

excursion$_i$ = (Concentration$_i$)/(Objective$_j$)

Where test values must not fall below the objective:

excursion$_i$ = (Objective$_j$)/(Concentration$_i$)

Where the objective is zero:

excursion$_i$ = Concentration$_i$

Appendices 1 through 7.

Appendix 1. Lake Manitoba water quality except for bacteria and chlorophyll (Appendix 2) from June 1973 to December 2001.

Site	Sample Date	Location	Temperature Degrees C	Specific Conductivity uS/cm	Total Solids mg/L	Total Dissolved Solids mg/L	Total Suspended Solids mg/L	Turbidity NTU	Secchi Disc Depth m	Total Depth m	True Colour Colour Units	pH pH Units	Total Alkalinity mg/L
WQ0080	1973-06-18	L. Manitoba E. of Twin Is.	17.0	1490	1100	1085	15	---	---	---	---	8.24	138
WQ0080	1973-08-08	L. Manitoba E. of Twin Is.	22.0	1320	---	840	20	19.0	---	---	< 5	8.29	129
WQ0080	1974-02-28	L. Manitoba E. of Twin Is.	0.0	2000	1200	1200	15	9.0	---	---	< 5	7.80	200
WQ0080	1974-06-20	L. Manitoba E. of Twin Is.	19.0	1230	700	690	15	1.5	---	---	5	7.85	136
WQ0080	1974-09-18	L. Manitoba E. of Twin Is.	12.0	1340	730	725	5	5.0	---	---	5	8.25	139
WQ0080	1975-03-12	L. Manitoba E. of Twin Is.	0.0	1740	---	---	---	0.6	---	---	4	7.80	232
WQ0080	1975-06-03	L. Manitoba E. of Twin Is.	15.0	1050	590	590	< 5	1.0	---	---	5	8.50	160
WQ0080	1975-09-25	L. Manitoba E. of Twin Is.	---	1280	730	722	8	5.0	---	---	5	8.50	136
WQ0080	1976-01-28	L. Manitoba E. of Twin Is.	0.0	1680	952	952	< 5	1.5	---	---	< 5	8.00	216
WQ0080	1976-06-28	L. Manitoba E. of Twin Is.	20.0	1070	602	602	< 5	1.5	---	---	5	8.45	153
WQ0080	1976-08-16	L. Manitoba E. of Twin Is.	20.0	1133	642	635	7	5.0	---	---	10	8.60	138
WQ0080	1976-10-12	L. Manitoba E. of Twin Is.	8.0	1280	714	689	25	9.0	---	---	< 5	8.50	152
WQ0080	1977-02-28	L. Manitoba E. of Twin Is.	0.0	1700	1010	1000	11	1.5	---	---	< 5	8.00	216
WQ0080	1977-05-30	L. Manitoba E. of Twin Is.	20.0	1200	708	708	< 5	3.5	---	---	< 5	8.50	152
WQ0080	1977-09-19	L. Manitoba E. of Twin Is.	13.0	1270	738	724	14	9.6	---	---	5	8.40	138
WQ0079	1973-06-18	L. Manitoba N. of Pt. Asham	18.0	1500	1100	1090	10	---	---	---	---	8.27	139
WQ0079	1973-08-08	L. Manitoba N. of Pt. Asham	22.0	1350	---	870	20	12.5	---	---	< 5	8.51	137
WQ0079	1974-02-28	L. Manitoba N. of Pt. Asham	0.0	1750	1050	1050	10	10.0	---	---	5	7.95	162
WQ0079	1974-06-20	L. Manitoba N. of Pt. Asham	19.5	1620	880	870	15	1.5	---	---	10	8.25	152
WQ0079	1974-09-18	L. Manitoba N. of Pt. Asham	12.0	1360	750	740	10	5.5	---	---	5	8.39	137
WQ0079	1975-03-12	L. Manitoba N. of Pt. Asham	0.0	1670	---	---	---	1.5	---	---	5	8.20	248
WQ0079	1975-06-03	L. Manitoba N. of Pt. Asham	15.0	1400	780	780	< 5	2.0	---	---	50	8.50	168
WQ0079	1975-09-25	L. Manitoba N. of Pt. Asham	---	1220	686	686	< 5	4.5	---	---	< 5	8.50	140
WQ0079	1976-01-28	L. Manitoba N. of Pt. Asham	0.0	1500	890	890	< 5	1.0	---	---	6	8.20	190
WQ0079	1976-06-28	L. Manitoba N. of Pt. Asham	20.0	1284	736	736	< 5	2.0	---	---	< 5	8.50	152
WQ0079	1976-08-16	L. Manitoba N. of Pt. Asham	20.0	1305	756	746	10	0.7	---	---	< 5	8.65	147
WQ0079	1976-10-12	L. Manitoba N. of Pt. Asham	8.0	1270	728	704	24	9.0	---	---	< 5	8.60	154
WQ0079	1977-02-28	L. Manitoba N. of Pt. Asham	0.0	1590	946	938	8	1.0	---	---	< 5	8.10	200
WQ0079	1977-05-30	L. Manitoba N. of Pt. Asham	21.0	1270	740	733	7	4.5	---	---	10	8.40	154
WQ0079	1977-09-19	L. Manitoba N. of Pt. Asham	13.0	1280	750	734	16	12.0	---	---	5	8.45	150
WQ0079	1994-08-29	L. Manitoba N. of Pt. Asham	---	1640	970	970	< 5	9.6	---	---	5	8.68	152
WQ0078	1973-06-18	L. Manitoba near Reed Is.	18.0	1680	1300	1285	15	---	---	---	---	8.34	151
WQ0078	1973-08-08	L. Manitoba near Reed Is.	22.0	1520	---	975	25	26.0	---	---	< 5	8.56	152
WQ0078	1974-02-28	L. Manitoba near Reed Is.	0.0	1920	1200	1200	5	9.0	---	---	< 5	8.10	180
WQ0078	1974-06-20	L. Manitoba near Reed Is.	19.5	1680	930	910	20	2.0	---	---	5	8.21	166
WQ0078	1974-09-18	L. Manitoba near Reed Is.	12.0	1760	990	975	15	8.0	---	---	5	8.41	170
WQ0078	1975-03-12	L. Manitoba near Reed Is.	0.0	2060	---	---	---	2.0	---	---	4	8.15	236
WQ0078	1975-06-03	L. Manitoba near Reed Is.	15.0	1480	840	840	< 5	1.5	---	---	5	8.40	172
WQ0078	1975-09-25	L. Manitoba near Reed Is.	---	1590	920	920	< 5	4.5	---	---	< 5	8.60	174
WQ0078	1976-01-28	L. Manitoba near Reed Is.	0.0	1920	1110	1110	< 5	1.0	---	---	5	8.30	214
WQ0078	1976-06-28	L. Manitoba near Reed Is.	20.0	1404	852	846	6	3.0	---	---	< 5	8.60	182
WQ0078	1976-08-16	L. Manitoba near Reed Is.	20.0	1617	922	815	7	3.5	---	---	5	8.80	184
WQ0078	1976-10-12	L. Manitoba near Reed Is.	8.0	1650	966	948	18	8.5	---	---	< 5	8.55	194
WQ0078	1977-02-28	L. Manitoba near Reed Is.	0.0	1900	1140	1130	8	1.5	---	---	< 5	8.20	228
WQ0078	1977-05-30	L. Manitoba near Reed Is.	20.0	1480	866	866	< 5	3.0	---	---	< 5	8.60	174
WQ0078	1977-07-11	L. Manitoba near Reed Is.	21.0	1520	914	886	28	15.0	---	---	25	8.60	168
WQ0078	1977-09-19	L. Manitoba near Reed Is.	13.5	1460	844	831	13	11.0	---	---	< 5	8.50	164
WQ0078	1978-08-08	L. Manitoba near Reed Is.	22.0	1520	---	975	25	26.0	---	---	< 5	8.56	152
WQ0078	1994-08-29	L. Manitoba near Reed Is.	---	1770	1000	1000	< 5	6.7	---	---	< 5	8.65	169
WQ0077	1973-06-18	L. Manitoba E. of Duscharme Is.	18.0	2210	1600	1585	15	---	---	---	---	8.46	216
WQ0077	1973-08-08	L. Manitoba E. of Duscharme Is.	22.0	1850	---	1265	35	16.0	---	---	< 5	8.68	195
WQ0077	1974-02-28	L. Manitoba E. of Duscharme Is.	0.0	2550	1600	1600	10	11.0	---	---	5	8.18	265
WQ0077	1974-06-20	L. Manitoba E. of Duscharme Is.	19.5	2180	1650	1650	20	2.0	---	---	5	8.40	224
WQ0077	1974-09-18	L. Manitoba E. of Duscharme Is.	13.0	1930	1100	1100	25	10.0	---	---	5	8.69	201
WQ0077	1975-03-12	L. Manitoba E. of Duscharme Is.	0.0	2690	---	---	---	1.5	---	---	2	8.20	312
WQ0077	1975-06-03	L. Manitoba E. of Duscharme Is.	15.0	2030	1200	1200	< 5	3.5	---	---	5	8.60	244
WQ0077	1975-09-25	L. Manitoba E. of Duscharme Is.	---	1990	1120	1100	14	15.0	---	---	5	8.70	216
WQ0077	1976-01-28	L. Manitoba E. of Duscharme Is.	0.0	2230	1310	1310	< 5	1.5	---	---	5	8.30	278
WQ0077	1976-06-28	L. Manitoba E. of Duscharme Is.	19.0	1771	1040	1030	11	6.0	---	---	< 5	8.60	220
WQ0077	1976-08-16	L. Manitoba E. of Duscharme Is.	20.0	1932	1130	1110	16	10.0	---	---	10	8.75	225
WQ0077	1976-10-12	L. Manitoba E. of Duscharme Is.	7.0	1850	1070	1040	33	10.0	---	---	< 5	8.60	224
WQ0077	1977-02-28	L. Manitoba E. of Duscharme Is.	0.0	2280	1370	1360	9	2.0	---	---	< 5	8.20	290
WQ0077	1977-05-30	L. Manitoba E. of Duscharme Is.	21.0	1700	1000	1000	< 5	5.5	---	---	< 5	8.60	214
WQ0077	1977-07-11	L. Manitoba E. of Duscharme Is.	21.0	1680	1120	979	141	76.0	---	---	5	8.60	218
WQ0077	1977-09-19	L. Manitoba E. of Duscharme Is.	14.5	1640	982	962	20	0.8	---	---	5	8.60	202
WQ0077	1994-08-30	L. Manitoba E. of Duscharme Is.	---	1900	1100	1100	< 5	8.9	---	---	5	8.74	205
WQ0076	1973-08-08	L. Manitoba near Sandy Bay	22.0	1920	---	1260	40	14.0	---	---	< 5	8.69	208
WQ0076	1975-03-12	L. Manitoba near Sandy Bay	0.0	2470	---	---	---	1.5	---	---	2	8.30	286
WQ0076	1975-06-03	L. Manitoba near Sandy Bay	15.0	1970	1100	1100	10	4.0	---	---	< 5	8.60	226
WQ0076	1975-09-25	L. Manitoba near Sandy Bay	---	2020	1170	1160	18	9.0	---	---	5	8.80	216
WQ0076	1976-01-28	L. Manitoba near Sandy Bay	0.0	2150	1270	1270	< 5	1.5	---	---	< 5	8.40	248
WQ0076	1976-06-28	L. Manitoba near Sandy Bay	19.0	1377	820	807	13	6.5	---	---	10	8.60	200
WQ0076	1976-08-16	L. Manitoba near Sandy Bay	18.0	1465	986	838	148	6.5	---	---	10	8.80	203
WQ0076	1976-10-12	L. Manitoba near Sandy Bay	8.0	1790	1080	1040	38	15.0	---	---	< 5	8.70	222
WQ0076	1977-02-28	L. Manitoba near Sandy Bay	0.0	2060	1260	1250	7	2.0	---	---	< 5	8.20	266
WQ0076	1977-05-30	L. Manitoba near Sandy Bay	20.5	1620	966	958	8	5.0	---	---	< 5	8.60	210
WQ0076	1977-09-19	L. Manitoba near Sandy Bay	12.5	1690	1080	966	114	60.0	---	---	5	8.60	210

Appendix 1. (Continued).

Site	Sample Date	Location	Temperature Degrees C	Specific Conductivity uS/cm	Total Solids mg/L	Total Dissolved Solids mg/L	Total Suspended Solids mg/L	Turbidity NTU	Secchi Disc Depth m	Total Depth m	True Colour Colour Units	pH pH Units	Total Alkalinity mg/L
WQ0076	1994-08-30	L. Manitoba near Sandy Bay	---	1950	1200	1100	33	31.0	---	---	5	8.70	234
WQ0597	1980-1983	Lake Manitoba near Twin Lakes Beach	Secchi Disc and Chlorophyll a in Appendix 2				---	---	Appendix 2		---	---	---
WQ0597	1994-08-29	Lake Manitoba near Twin Lakes Beach	---	2060	1200	1200	< 5	17.0	---	---	5	8.72	235
WQ0075	1973-08-08	L. Manitoba near Delta	22.0	1900	---	1265	35	---	---	---	< 5	8.65	203
WQ0075	1974-02-28	L. Manitoba near Delta	0.0	2500	1600	1600	5	---	---	---	< 5	8.22	270
WQ0075	1974-06-20	L. Manitoba near Delta	19.0	1410	790	770	25	6.5	---	---	5	8.30	135
WQ0075	1975-03-12	L. Manitoba near Delta	0.0	2410	---	---	---	3.0	---	---	2	8.00	286
WQ0075	1975-06-03	L. Manitoba near Delta	14.0	1480	910	870	40	20.0	---	---	15	8.50	212
WQ0075	1975-09-25	L. Manitoba near Delta	---	1830	1070	1060	8	6.0	---	---	5	8.70	208
WQ0075	1976-01-28	L. Manitoba near Delta	0.0	2220	1260	1260	< 5	2.0	---	---	5	8.20	272
WQ0075	1976-06-28	L. Manitoba near Delta	17.5	1166	752	717	35	10.0	---	---	10	8.60	185
WQ0075	1976-08-16	L. Manitoba near Delta	19.0	1628	974	966	8	9.7	---	---	5	8.85	194
WQ0075	1976-10-12	L. Manitoba near Delta	7.0	1650	948	894	54	25.0	---	---	5	8.50	215
WQ0075	1977-02-28	L. Manitoba near Delta	0.0	2140	1280	1270	9	1.5	---	---	< 5	8.10	284
WQ0075	1977-05-30	L. Manitoba near Delta	20.0	1650	984	984	< 5	3.0	---	---	< 5	8.60	210
WQ0666	1991-08-20	L. Manitoba near Delta Field Station	21.4	2020	1170	1150	16	16.0	---	---	< 15	8.93	230
WQ0666	1991-09-19	L. Manitoba near Delta Field Station	---	2070	1240	1140	96	80.0	---	---	10	8.74	234
WQ0666	1991-10-23	L. Manitoba near Delta Field Station	---	2040	1180	1140	40	31.0	---	---	< 10	8.46	238
WQ0666	1991-11-20	L. Manitoba near Delta Field Station	---	1840	1040	1030	13	12.0	---	---	10	8.10	205
WQ0666	1991-12-11	L. Manitoba near Delta Field Station	0.0	2370	1360	1350	11	8.4	---	---	5	8.38	267
WQ0666	1992-01-21	L. Manitoba near Delta Field Station	0.0	2470	1400	1400	6	3.3	---	---	< 5	8.26	282
WQ0666	1992-02-18	L. Manitoba near Delta Field Station	0.0	2500	1500	1500	< 5	2.3	---	---	5	8.27	288
WQ0666	1992-03-10	L. Manitoba near Delta Field Station	0.0	2500	1400	1400	8	2.5	---	---	< 5	8.10	286
WQ0666	1992-04-08	L. Manitoba near Delta Field Station	---	427	320	250	74	66.0	---	---	< 30	8.05	108
WQ0666	1992-05-25	L. Manitoba near Delta Field Station	10.0	1610	950	930	25	17.0	---	---	5	8.34	201
WQ0666	1992-06-15	L. Manitoba near Delta Field Station	18.0	1690	990	950	44	42.0	---	---	5	8.69	213
WQ0666	1992-07-13	L. Manitoba near Delta Field Station	16.0	1760	1100	1100	16	14.0	---	---	5	8.71	226
WQ0666	1992-08-18	L. Manitoba near Delta Field Station	---	1970	110	110	26	22.0	---	---	< 5	8.77	226
WQ0666	1992-09-15	L. Manitoba near Delta Field Station	---	1840	1100	1100	28	21.0	---	---	< 5	8.63	222
WQ0666	1992-10-07	L. Manitoba near Delta Field Station	---	1980	1200	1100	77	74.0	---	---	5	8.57	240
WQ0666	1992-11-17	L. Manitoba near Delta Field Station	---	2080	1200	1200	27	23.0	---	---	< 5	8.43	250
WQ0666	1992-12-08	L. Manitoba near Delta Field Station	0.0	2100	1200	1200	< 5	8.1	---	---	5	8.38	260
WQ0666	1993-01-12	L. Manitoba near Delta Field Station	0.0	2320	1300	1300	7	5.7	---	---	5	7.31	439
WQ0666	1993-02-09	L. Manitoba near Delta Field Station	0.0	2360	1000	990	7	4.6	---	---	5	8.27	289
WQ0666	1993-03-16	L. Manitoba near Delta Field Station	0.0	2500	1400	1400	< 5	3.0	---	---	5	8.19	299
WQ0666	1993-04-14	L. Manitoba near Delta Field Station	0.5	394	220	220	< 5	2.4	1.25	3.3	< 5	8.07	54.6
WQ0666	1993-05-18	L. Manitoba near Delta Field Station	9.5	1830	1100	1100	25	15.0	0.46	3.64	< 5	8.58	221
WQ0666	1993-06-15	L. Manitoba near Delta Field Station	---	1810	1100	1100	25	22.0	---	---	< 5	8.53	223
WQ0666	1993-07-13	L. Manitoba near Delta Field Station	17.5	1820	1100	---	< 5	22.0	0.40	3.5	5	8.59	226
WQ0666	1993-08-16	L. Manitoba near Delta Field Station	---	1850	1100	1100	12	11.0	---	---	5	8.63	225
WQ0666	1993-09-14	L. Manitoba near Delta Field Station	11.5	1880	1200	1100	53	44.0	0.20	3.5	< 5	8.54	234
WQ0666	1993-10-12	L. Manitoba near Delta Field Station	4.0	1940	1100	1100	39	31.0	0.30	3.5	< 5	8.49	241
WQ0666	1993-11-16	L. Manitoba near Delta Field Station	0.5	2090	1300	1200	50	48.0	0.24	2.2	10	8.32	256
WQ0666	1993-12-07	L. Manitoba near Delta Field Station	0.0	2200	1300	1300	13	12.0	0.60	3.1	5	8.35	272
WQ0666	1994-01-25	L. Manitoba near Delta Field Station	0.0	2480	1500	1500	8	3.5	---	---	< 5	8.25	306
WQ0666	1994-02-15	L. Manitoba near Delta Field Station	0.0	2660	1600	1600	< 5	2.6	0.86	3.61	5	8.22	326
WQ0666	1994-03-15	L. Manitoba near Delta Field Station	1.0	1910	1200	1200	7	7.4	0.60	3.1	5	8.19	216
WQ0666	1994-04-12	L. Manitoba near Delta Field Station	1.5	255	150	150	< 5	2.1	1.80	3.2	< 5	8.72	34.7
WQ0666	1994-05-24	L. Manitoba near Delta Field Station	15.5	1930	1100	1100	< 5	9.6	0.65	3.1	5	8.60	241
WQ0666	1994-06-14	L. Manitoba near Delta Field Station	18.5	1910	1200	1200	13	10.0	0.65	3.6	< 5	8.65	238
WQ0666	1994-07-12	L. Manitoba near Delta Field Station	19.5	1860	1300	1300	34	28.0	0.34	3.55	< 5	8.71	239
WQ0666	1994-08-15	L. Manitoba near Delta Field Station	18.0	1420	930	910	16	13.0	0.45	3.62	15	8.59	249
WQ0666	1994-09-12	L. Manitoba near Delta Field Station	17.0	1810	1100	1100	21	17.0	0.45	3.3	5	8.71	238
WQ0666	1994-10-25	L. Manitoba near Delta Field Station	5.0	1980	1300	1200	77	79.0	0.20	3.25	10	8.54	250
WQ0666	1994-11-22	L. Manitoba near Delta Field Station	0.0	2100	1300	1300	19	20.0	0.35	0.65	5	8.45	256
WQ0666	1994-12-12	L. Manitoba near Delta Field Station	0.3	2230	1400	1400	< 5	8.3	0.50	3.5	15	8.39	272
WQ0666	1995-01-24	L. Manitoba near Delta Field Station	0.0	2420	1400	1400	< 5	3.4	0.82	3.6	5	8.35	289
WQ0666	1995-02-21	L. Manitoba near Delta Field Station	0.5	2530	1500	1500	< 5	2.8	1.10	3.4	5	8.26	307
WQ0666	1995-03-21	L. Manitoba near Delta Field Station	0.5	729	470	410	53	55.0	0.30	---	< 5	8.37	99.6
WQ0666	1995-04-17	L. Manitoba near Delta Field Station	1.0	483	590	320	270	> 200	0.08	---	> 5	7.65	135
WQ0666	1995-04-20	L. Manitoba near Delta Field Station	1.5	278	310	170	150	120.0	0.10	---	< 35	7.88	85.4
WQ0666	1995-05-17	L. Manitoba near Delta Field Station	15.5	624	450	380	75	97.0	0.10	---	20	7.96	164
WQ0666	1995-06-13	L. Manitoba near Delta Field Station	18.5	1020	630	620	6	5.5	0.50	---	15	8.49	196
WQ0666	1995-07-11	L. Manitoba near Delta Field Station	23.0	1510	950	950	< 5	9.0	0.65	---	10	8.72	216
WQ0666	1995-08-15	L. Manitoba near Delta Field Station	20.0	1570	960	930	32	26.0	0.55	---	10	8.65	218
WQ0666	1995-09-26	L. Manitoba near Delta Field Station	10.0	1750	1000	1000	18	16.0	0.45	---	10	8.62	228
WQ0666	1995-10-23	L. Manitoba near Delta Field Station	6.5	1810	1100	1000	91	80.0	0.15	---	15	8.58	246
WQ0666	1995-11-02	L. Manitoba near Delta Field Station	12.5	1920	1100	1100	19	21.0	0.35	---	15	8.41	244
WQ0666	1995-12-18	L. Manitoba near Delta Field Station	0.5	2010	1200	1200	67	16.0	0.45	---	< 5	8.48	260
WQ0666	1996-01-30	L. Manitoba near Delta Field Station	0.0	2130	1300	1300	< 5	6.0	0.75	---	5	8.36	274
WQ0666	1996-02-28	L. Manitoba near Delta Field Station	0.0	2180	1300	1300	< 5	4.1	1.00	---	15	8.17	280
WQ0666	1996-03-19	L. Manitoba near Delta Field Station	0.0	2180	1300	1300	< 5	3.0	1.00	---	10	8.04	287
WQ0666	1996-04-16	L. Manitoba near Delta Field Station	0.5	39	32	32	< 5	3.9	0.45	---	10	7.46	10.9
WQ0666	1996-05-13	L. Manitoba near Delta Field Station	2.5	698	420	410	8	0.2	0.51	---	20	8.64	135
WQ0666	1996-06-17	L. Manitoba near Delta Field Station	21.5	1120	630	610	18	15.0	0.60	---	5	8.66	178
WQ0666	1996-07-15	L. Manitoba near Delta Field Station	24.0	1360	870	860	11	8.6	1.00	---	5	8.82	211
WQ0666	1996-08-20	L. Manitoba near Delta Field Station	21.0	1270	790	770	19	16.0	0.40	---	15	8.85	199

Appendix 1. (Continued).

Site	Sample Date	Location	Temperature Degrees C	Specific Conductivity uS/cm	Total Solids mg/L	Total Dissolved Solids mg/L	Total Suspended Solids mg/L	Turbidity NTU	Secchi Disc Depth m	Total Depth m	True Colour Colour Units	pH pH Units	Total Alkalinity mg/L
WQ0666	1996-09-24	L. Manitoba near Delta Field Station	13.2	1410	820	800	23	19.0	0.45	---	10	8.74	203
WQ0666	1996-10-28	L. Manitoba near Delta Field Station	3.7	1410	870	820	51	45.0	0.30	---	15	8.45	210
WQ0666	1996-11-19	L. Manitoba near Delta Field Station	0.0	1560	940	910	32	32.0	0.40	---	15	8.34	220
WQ0666	1996-12-10	L. Manitoba near Delta Field Station	0.0	1600	980	940	42	41.0	0.60	---	10	8.35	262
WQ0666	1997-01-28	L. Manitoba near Delta Field Station	0.0	1830	1100	1100	< 5	2.5	0.50	---	10	8.10	257
WQ0666	1997-02-25	L. Manitoba near Delta Field Station	0.1	1860	1100	1100	< 5	2.9	1.10	---	10	7.92	263
WQ0666	1997-03-25	L. Manitoba near Delta Field Station	0.1	1910	1100	1100	< 5	2.8	1.25	---	10	8.07	267
WQ0666	1997-04-27	L. Manitoba near Delta Field Station	0.3	125	62	59	< 5	1.7	0.75	---	5	9.29	38.3
WQ0666	1997-05-27	L. Manitoba near Delta Field Station	10.9	918	600	590	12	13.0	0.50	---	20	8.49	192
WQ0666	1997-06-30	L. Manitoba near Delta Field Station	16.0	1410	890	840	51	34.0	0.25	---	15	8.56	205
WQ0666	1997-07-29	L. Manitoba near Delta Field Station	23.2	1500	870	850	15	14.0	0.50	---	5	8.74	203
WQ0666	1997-08-26	L. Manitoba near Delta Field Station	19.8	1420	850	830	19	16.0	0.50	---	15	8.73	195
WQ0666	1997-09-23	L. Manitoba near Delta Field Station	12.9	1440	850	830	25	26.0	0.40	---	< 5	8.65	202
WQ0666	1997-10-29	L. Manitoba near Delta Field Station	0.0	1450	970	900	73	76.0	0.15	---	20	8.39	208
WQ0666	1997-11-25	L. Manitoba near Delta Field Station	0.2	1650	1000	1000	16	17.0	0.50	---	10	8.28	228
WQ0666	1997-12-16	L. Manitoba near Delta Field Station	0.1	1720	1000	1000	5	4.4	1.32	---	15	8.33	231
WQ0666	1998-01-27	L. Manitoba near Delta Field Station	0.0	1850	1100	1100	< 5	3.3	1.75	---	10	8.19	254
WQ0666	1998-02-24	L. Manitoba near Delta Field Station	0.2	1690	1000	990	< 5	1.7	2.00	---	5	8.11	226
WQ0666	1998-03-30	L. Manitoba near Delta Field Station	0.2	1770	1200	1200	5	3.9	1.35	---	5	8.03	242
WQ0666	1998-04-18	L. Manitoba near Delta Field Station	8.0	1150	750	---	---	11.0	0.45	---	15	8.43	176
WQ0666	1998-05-26	L. Manitoba near Delta Field Station	20.6	1510	920	900	13	12.0	0.80	---	10	8.53	207
WQ0666	1998-06-23	L. Manitoba near Delta Field Station	17.8	1560	930	910	21	1.7	0.42	---	15	8.57	214
WQ0666	1998-07-28	L. Manitoba near Delta Field Station	21.4	1590	970	920	54	39.0	0.35	---	5	8.70	205
WQ0666	1998-08-26	L. Manitoba near Delta Field Station	21.0	1630	990	970	19	14.0	0.40	---	10	8.72	213
WQ0666	1998-09-29	L. Manitoba near Delta Field Station	13.7	1700	960	920	37	29.0	0.30	---	15	8.64	219
WQ0666	1998-10-27	L. Manitoba near Delta Field Station	6.9	1680	1000	980	35	34.0	0.25	---	10	8.36	220
WQ0666	1998-11-24	L. Manitoba near Delta Field Station	0.1	1790	1000	1000	12	13.0	0.80	---	10	8.48	255
WQ0666	1998-12-16	L. Manitoba near Delta Field Station	0.0	1870	1100	1100	12	8.1	---	---	10	8.43	245
WQ0666	1999-01-26	L. Manitoba near Delta Field Station	0.0	2210	1400	1400	6	14.0	1.60	---	15	8.35	285
WQ0666	1999-02-23	L. Manitoba near Delta Field Station	0.0	2170	1300	1300	< 5	4.5	---	---	10	8.33	288
WQ0666	1999-03-23	L. Manitoba near Delta Field Station	0.0	1740	940	940	< 5	2.5	2.42	---	10	8.35	220
WQ0666	1999-04-27	L. Manitoba near Delta Field Station	---	1100	---	650	34	28.0	0.30	---	120	8.32	187
WQ0666	1999-05-25	L. Manitoba near Delta Field Station	---	1040	---	690	51	41.0	0.25	---	80	8.56	230
WQ0666	1999-06-28	L. Manitoba near Delta Field Station	---	1230	---	810	27	21.0	---	---	35	8.64	245
WQ0666	1999-07-27	L. Manitoba near Delta Field Station	---	1570	---	930	28	22.0	---	---	15	8.71	225
WQ0666	1999-08-31	L. Manitoba near Delta Field Station	---	1560	---	920	27	15.0	---	---	15	8.71	214
WQ0666	1999-09-28	L. Manitoba near Delta Field Station	---	1590	---	950	45	35.0	0.30	---	15	8.65	219
WQ0666	1999-11-02	L. Manitoba near Delta Field Station	---	1620	---	980	96	99.0	0.10	---	20	8.40	224
WQ0666	1999-11-30	L. Manitoba near Delta Field Station	---	1740	---	930	77	82.0	0.22	---	20	8.40	255
WQ0666	1999-12-21	L. Manitoba near Delta Field Station	---	1850	---	1100	11	15.0	---	---	15	8.31	262
WQ0666	2000-01-25	L. Manitoba near Delta Field Station	0.0	2070	---	1200	< 5	5.8	---	---	10	8.30	284
WQ0666	2000-02-29	L. Manitoba near Delta Field Station	0.0	1990	---	1200	5	7.8	1.00	---	10	7.39	276
WQ0666	2000-03-21	L. Manitoba near Delta Field Station	0.0	1470	---	870	7	8.5	---	---	10	8.44	199
WQ0666	2000-04-25	L. Manitoba near Delta Field Station	8.8	1290	---	760	10	6.0	0.80	---	15	8.46	190
WQ0666	2000-05-29	L. Manitoba near Delta Field Station	14.5	1560	---	800	28	21.0	---	---	10	8.47	215
WQ0666	2000-06-27	L. Manitoba near Delta Field Station	---	1440	---	860	50	51.0	0.35	---	15	8.55	216
WQ0666	2000-07-26	L. Manitoba near Delta Field Station	21.6	1530	---	910	20	17.0	0.60	---	10	8.60	208
WQ0666	2000-08-29	L. Manitoba near Delta Field Station	---	1600	---	930	39	30.0	0.40	---	10	8.67	209
WQ0666	2000-09-27	L. Manitoba near Delta Field Station	---	1470	---	830	31	28.0	0.35	---	20	8.56	221
WQ0666	2000-10-31	L. Manitoba near Delta Field Station	6.7	1650	---	950	51	54.0	0.20	---	15	8.43	232
WQ0666	2000-11-28	L. Manitoba near Delta Field Station	0.0	1680	---	1000	110	140.0	0.13	---	25	8.34	252
WQ0666	2000-12-19	L. Manitoba near Delta Field Station	0.0	1780	---	980	97	110.0	0.30	---	15	8.21	257
WQ0666	2001-01-30	L. Manitoba near Delta Field Station	0.0	1960	---	1100	25	26.0	---	---	10	8.21	273
WQ0666	2001-02-27	L. Manitoba near Delta Field Station	0.0	2060	---	1100	< 5	12.0	---	---	10	8.12	284
WQ0666	2001-03-26	L. Manitoba near Delta Field Station	0.0	1270	---	840	14	16.0	0.40	---	25	7.85	326
WQ0666	2001-04-30	L. Manitoba near Delta Field Station	---	957	---	555.0	40.00	24	---	---	40	7.48	176
WQ0666	2001-05-30	L. Manitoba near Delta Field Station	---	1030	---	648.0	27.00	18	---	---	30	8.28	207
WQ0666	2001-06-27	L. Manitoba near Delta Field Station	---	1210	---	707.0	69.00	41	---	---	10	8.18	214
WQ0666	2001-07-30	L. Manitoba near Delta Field Station	---	1220	---	716.0	12.00	7.5	---	---	5	8.52	---
WQ0666	2001-08-28	L. Manitoba near Delta Field Station	---	1340	---	792.0	18.00	6.5	---	---	10	8.00	214
WQ0666	2001-09-26	L. Manitoba near Delta Field Station	---	1400	---	894.0	11.00	6.8	---	---	5	8.53	223
WQ0666	2001-10-31	L. Manitoba near Delta Field Station	---	1370	---	904.0	56.00	34	---	---	5	8.18	232
WQ0666	2001-11-30	L. Manitoba near Delta Field Station	---	1710	---	981.0	32.00	14	---	---	5	8.28	248
WQ0666	2001-12-18	L. Manitoba near Delta Field Station	---	1660	---	1010.0	8.00	3.9	---	---	5	8.20	254
WQ1094	1994-08-30	L. Manitoba north of Whitemud R. mouth	---	1950	1200	1100	38	41.0	---	---	5	8.75	230
WQ1436	1998-07-02	L. Manitoba at Laurentia Beach area	---	1520	---	---	---	10.0	---	---	---	8.83	---
WQ1744	1997-2000	L. Manitoba at St. Ambrose Beach	Bacteria in Appendix 2		---	---	---	---	---	---	---	---	---
WQ1745	1997-2000	L. Manitoba at Delta Beach	Bacteria in Appendix 2		---	---	---	---	---	---	---	---	---
WQ1746	1997-2000	L. Manitoba at Lynchs Pt. Beach	Bacteria in Appendix 2		---	---	---	---	---	---	---	---	---

Appendix 1. (Continued).

Site	Sample Date	Bicarbonate Alkalinity mg/L	Carbonate Alkalinity mg/L	Hydroxide Alkalinity mg/L	Calcium Extractable mg/L	Calcium Total mg/L	Calcium Dissolved mg/L	Magnesium Extractable mg/L	Magnesium Total mg/L	Magnesium Dissolved mg/L	Hardness (CsCO$_3$) mg/L	Manganese Extractable mg/L	Manganese Total mg/L	Manganese Dissolved mg/L	Iron Extractable mg/L
WQ0080	1973-06-18	168	0	0	---	---	---	---	---	---	240	---	---	---	---
WQ0080	1973-08-08	157	0	0	---	---	---	28.0	---	---	210	< 0.25	---	---	0.05
WQ0080	1974-02-28	244	0	0	---	---	---	39.0	---	---	345	---	---	---	---
WQ0080	1974-06-20	166	0	0	60.3	---	---	29.0	---	---	270	0.11	---	---	0.05
WQ0080	1974-09-18	170	0	0	45.0	---	---	28.0	---	---	227	---	---	---	---
WQ0080	1975-03-12	283	0	0	75.0	---	---	38.0	---	---	344	---	---	---	---
WQ0080	1975-06-03	176	9.6	0	45.0	---	---	29.0	---	---	232	---	---	---	---
WQ0080	1975-09-25	151	7.2	0	45.0	---	---	26.0	---	---	220	---	---	---	---
WQ0080	1976-01-28	264	0	0	70.0	---	---	39.0	---	---	335	---	---	---	---
WQ0080	1976-06-28	179	3.6	0	45.0	---	---	24.0	---	---	212	---	---	---	---
WQ0080	1976-08-16	154	7.2	0	42.5	---	---	28.0	---	---	221	---	---	---	---
WQ0080	1976-10-12	173	6	0	47.5	---	---	28.0	---	---	234	---	---	---	---
WQ0080	1977-02-28	264	0	0	65.0	---	---	42.0	---	---	336	---	---	---	---
WQ0080	1977-05-30	176	4.8	0	45.0	---	---	28.0	---	---	228	---	---	---	---
WQ0080	1977-09-19	163	2.4	0	42.5	---	---	31.3	---	---	235	---	---	---	---
WQ0079	1973-06-18	170	0	0	---	---	---	---	---	---	245	---	---	---	---
WQ0079	1973-08-08	145	11	0	---	---	---	31.0	---	---	224	< 0.25	---	---	< 0.05
WQ0079	1974-02-28	198	0	0	---	---	---	38.0	---	---	300	---	---	---	---
WQ0079	1974-06-20	185	0	0	62.2	---	---	40.0	---	---	320	---	---	---	---
WQ0079	1974-09-18	157	4.8	0	47.5	---	---	29.0	---	---	238	---	---	---	---
WQ0079	1975-03-12	303	0	0	60.0	---	---	39.0	---	---	310	---	---	---	---
WQ0079	1975-06-03	176	14	0	45.0	---	---	31.0	---	---	240	---	---	---	---
WQ0079	1975-09-25	156	7.2	0	45.0	---	---	26.0	---	---	220	---	---	---	---
WQ0079	1976-01-28	232	0	0	55.0	---	---	39.0	---	---	298	---	---	---	---
WQ0079	1976-06-28	176	4.8	0	50.0	---	---	28.0	---	---	240	---	---	---	---
WQ0079	1976-08-16	160	9.6	0	42.5	---	---	32.0	---	---	238	---	---	---	---
WQ0079	1976-10-12	173	7.2	0	47.5	---	---	30.0	---	---	242	---	---	---	---
WQ0079	1977-02-28	244	0	0	55.0	---	---	40.0	---	---	302	---	---	---	---
WQ0079	1977-05-30	183	2.4	0	45.0	---	---	30.0	---	---	236	---	---	---	---
WQ0079	1977-09-19	173	4.8	0	45.0	---	---	33.0	---	---	248	---	---	---	---
WQ0079	1994-08-29	150	< 18.0	< 10.2	40.3	---	---	37.1	---	---	253	< 0.02	---	---	0.05
WQ0078	1973-06-18	184	0	0	---	---	---	---	---	---	275	---	---	---	---
WQ0078	1973-08-08	166	9.6	0	---	---	---	39.0	---	---	244	< 0.25	---	---	< 0.05
WQ0078	1974-02-28	220	0	0	---	---	---	51.0	---	---	350	---	---	---	---
WQ0078	1974-06-20	203	0	0	52.6	---	---	47.0	---	---	325	---	---	---	---
WQ0078	1974-09-18	183	12	0	45.0	---	---	47.0	---	---	305	---	---	---	---
WQ0078	1975-03-12	289	0	0	60.0	---	---	50.0	---	---	356	---	---	---	---
WQ0078	1975-06-03	181	14	0	35.0	---	---	48.0	---	---	285	---	---	---	---
WQ0078	1975-09-25	188	12	0	42.5	---	---	40.0	---	---	210	---	---	---	---
WQ0078	1976-01-28	261	0	0	55.0	---	---	60.0	---	---	385	---	---	---	---
WQ0078	1976-06-28	203	9.6	0	40.0	---	---	46.0	---	---	289	---	---	---	---
WQ0078	1976-08-16	198	13.2	0	40.0	---	---	50.0	---	---	306	---	---	---	---
WQ0078	1976-10-12	207	14.4	0	40.0	---	---	47.0	---	---	293	---	---	---	---
WQ0078	1977-02-28	278	0	0	55.0	---	---	58.0	---	---	376	---	---	---	---
WQ0078	1977-05-30	188	12	0	40.0	---	---	42.0	---	---	273	---	---	---	---
WQ0078	1977-07-11	190	7.2	0	45.0	---	---	42.0	---	---	286	---	---	---	---
WQ0078	1977-09-19	188	6	0	47.5	---	---	44.8	---	---	303	---	---	---	---
WQ0078	1978-08-08	166	9.6	0	---	---	---	39.0	---	---	244	< 0.25	---	---	< 0.05
WQ0078	1994-08-29	165	20.3	< 10.2	40.6	---	---	43.4	---	---	280	0.02	---	---	0.05
WQ0077	1973-06-18	239	12	0	---	---	---	---	---	---	400	---	---	---	---
WQ0077	1973-08-08	209	14	0	---	---	---	65.0	---	---	---	< 0.25	---	---	0.06
WQ0077	1974-02-28	323	0	0	---	---	---	89.0	---	---	480	---	---	---	---
WQ0077	1974-06-20	254	10	0	56.6	---	---	75.0	---	---	450	---	---	---	---
WQ0077	1974-09-18	184	3	0	45.0	---	---	61.0	---	---	363	---	---	---	---
WQ0077	1975-03-12	381	0	0	60.0	---	---	87.0	---	---	507	---	---	---	---
WQ0077	1975-06-03	244	26	0	35.0	---	---	86.0	---	---	442	---	---	---	---
WQ0077	1975-09-25	220	21.6	0	40.0	---	---	60.0	---	---	347	---	---	---	---
WQ0077	1976-01-28	339	0	0	50.0	---	---	80.0	---	---	453	---	---	---	---
WQ0077	1976-06-28	246	10.8	0	40.0	---	---	60.0	---	---	347	---	---	---	---
WQ0077	1976-08-16	250	12	0	40.0	---	---	66.0	---	---	371	---	---	---	---
WQ0077	1976-10-12	244	14.4	0	42.5	---	---	59.0	---	---	349	---	---	---	---
WQ0077	1977-02-28	354	0	0	55.0	---	---	82.0	---	---	475	---	---	---	---
WQ0077	1977-05-30	232	14.4	0	40.0	---	---	58.0	---	---	338	---	---	---	---
WQ0077	1977-07-11	242	12	0	60.0	---	---	60.0	---	---	397	---	---	---	---
WQ0077	1977-09-19	227	9.6	0	38.8	---	---	59.5	---	---	342	---	---	---	---
WQ0077	1994-08-30	194	27.5	< 10.2	36.5	---	---	56.6	---	---	324	0.02	---	---	0.08
WQ0076	1973-08-08	225	0.14	0	---	---	---	69.0	---	---	385	< 0.25	---	---	0.07
WQ0076	1975-03-12	349	0	0	50.0	---	---	80.0	---	---	453	---	---	---	---
WQ0076	1975-06-03	217	29	0	35.0	---	---	74.0	---	---	392	---	---	---	---
WQ0076	1975-09-25	220	21.6	0	40.0	---	---	61.0	---	---	350	---	---	---	---
WQ0076	1976-01-28	264	19.2	0	45.0	---	---	78.0	---	---	433	---	---	---	---
WQ0076	1976-06-28	227	8.4	0	40.0	---	---	48.0	---	---	297	---	---	---	---
WQ0076	1976-08-16	223	12	0	60.0	---	---	58.0	---	---	388	---	---	---	---
WQ0076	1976-10-12	246	12	0	42.5	---	---	58.0	---	---	344	---	---	---	---
WQ0076	1977-02-28	325	0	0	50.0	---	---	75.0	---	---	433	---	---	---	---
WQ0076	1977-05-30	227	14.4	0	40.0	---	---	57.0	---	---	334	---	---	---	---
WQ0076	1977-09-19	232	12	0	50.0	---	---	64.5	---	---	391	---	---	---	---

Appendix 1. (Continued).

Site	Sample Date	Bicarbonate Alkalinity mg/L	Carbonate Alkalinity mg/L	Hydroxide Alkalinity mg/L	Calcium Extractable mg/L	Calcium Total mg/L	Calcium Dissolved mg/L	Magnesium Extractable mg/L	Magnesium Total mg/L	Magnesium Dissolved mg/L	Hardness (CsCO$_3$) mg/L	Manganese Extractable mg/L	Manganese Total mg/L	Manganese Dissolved mg/L	Iron Extractable mg/L
WQ0076	1994-08-30	230	27	< 10.2	40.2	---	---	64.1	---	---	364	0.06	---	---	0.23
WQ0597	1980-1983	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0597	1994-08-29	238	24	< 10.2	38.6	---	---	67.1	---	---	373	0.02	---	---	0.11
WQ0075	1973-08-08	208	19	0	---	---	---	68.0	---	---	385	< 0.25	---	---	0.05
WQ0075	1974-02-28	329	0	0	---	---	---	93.0	---	---	430	---	---	---	---
WQ0075	1974-06-20	150	7	0	48.1	---	---	51.0	---	---	330	0.05	---	---	0.05
WQ0075	1975-03-12	349	0	0	50.0	---	---	80.0	---	---	453	< 0.08	---	---	0.06
WQ0075	1975-06-03	220	19	0	< 5.00	---	---	60.0	---	---	253	0.05	---	---	0.82
WQ0075	1975-09-25	205	24	0	40.0	---	---	56.0	---	---	330	0.02	---	---	0.17
WQ0075	1976-01-28	332	0	0	45.0	---	---	76.0	---	---	426	< 0.02	---	---	0.05
WQ0075	1976-06-28	209	8.4	0	45.0	---	---	42.0	---	---	286	0.04	---	---	0.41
WQ0075	1976-08-16	203	16.8	0	37.5	---	---	56.0	---	---	324	0.02	---	---	0.09
WQ0075	1976-10-12	243	9.6	0	45.0	---	---	57.0	---	---	347	0.02	---	---	0.29
WQ0075	1977-02-28	346	0	0	55.0	---	---	79.0	---	---	462	0.02	---	---	0.02
WQ0075	1977-05-30	232	12	0	42.5	---	---	57.0	---	---	340	0.02	---	---	0.10
WQ0666	1991-08-20	214	32.7	0	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1991-09-19	224	30.2	0	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1991-10-23	261	14.7	0	38.5	---	---	65.5	---	---	366	0.04	---	---	0.39
WQ0666	1991-11-20	250	< 0.60	0	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1991-12-11	298	13.7	0	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-01-21	344	< 0.60	< 0.34	41.5	---	---	74.9	---	---	412	< 0.02	---	---	0.12
WQ0666	1992-02-18	352	< 0.60	< 0.34	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-03-10	349	< 0.60	< 0.34	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-04-08	132	< 0.60	< 0.34	47.4	---	---	20.8	---	---	204	0.16	---	---	2.08
WQ0666	1992-05-25	231	7.31	< 0.34	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-06-15	216	21.6	< 0.34	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-07-13	226	24.4	< 0.34	38.3	---	---	57.6	---	---	333	0.02	---	---	0.13
WQ0666	1992-08-18	224	25.4	< 0.34	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-09-15	271	< 0.60	< 0.34	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-10-07	254	19.4	< 0.34	46.3	---	---	64.7	---	---	382	0.07	---	---	0.74
WQ0666	1992-11-17	270	17.1	< 0.34	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-12-08	291	12.7	< 0.34	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-01-12	535	< 0.60	< 0.34	48.5	---	---	81.2	---	---	455	0.02	---	---	0.13
WQ0666	1993-02-09	352	< 0.60	< 0.34	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-03-16	365	< 0.60	< 0.34	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-04-14	66.7	< 0.60	< 0.34	12.1	---	---	13.7	---	---	86.6	0.04	---	---	0.17
WQ0666	1993-05-18	240	14.3	< 0.34	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-06-15	244	14	< 0.34	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-07-13	242	16.4	< 0.34	37.6	---	---	62.2	---	---	350	< 0.02	---	---	< 0.02
WQ0666	1993-08-16	239	17.2	< 0.34	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-09-14	260	12.7	< 0.34	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-10-12	269	12.3	< 0.34	44.9	---	---	37.2	---	---	265	0.02	---	---	0.09
WQ0666	1993-11-16	300	6.08	< 0.34	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-12-07	318	6.88	< 0.34	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-01-25	373	< 0.60	< 0.34	53.0	---	---	87.6	---	---	493	< 0.02	---	---	0.07
WQ0666	1994-02-15	397	< 0.60	< 0.34	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-03-15	264	< 0.60	< 0.34	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-04-12	8.04	16.9	< 0.34	6.7	---	---	8.4	---	---	51.4	< 0.02	---	---	0.06
WQ0666	1994-05-24	247	22.9	< 0.34	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-06-14	247	21.4	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-07-12	245	23.1	< 10.2	35.4	---	---	64.2	---	---	353	< 0.02	---	---	0.07
WQ0666	1994-08-15	255	23.8	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-09-12	241	24.4	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-10-25	270	< 18.0	< 10.2	36.8	---	---	66.2	---	---	364	< 0.02	---	---	0.15
WQ0666	1994-11-22	291	< 18.0	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-12-12	307	< 18.0	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-01-24	326	< 18.0	< 10.2	46.4	---	---	77.3	---	---	434	< 0.02	---	---	0.10
WQ0666	1995-02-21	374	< 18.0	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-03-21	108	< 18.0	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-04-17	165	< 18.0	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-04-20	104	< 18.0	< 10.2	27.5	---	---	11.9	---	---	118	0.13	---	---	1.56
WQ0666	1995-05-17	200	< 18.0	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-06-13	215	< 18.0	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-07-11	264	< 18.0	< 10.2	42.8	---	---	52.0	---	---	321	0.02	---	---	0.10
WQ0666	1995-08-15	226	19.9	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-09-26	237	19.9	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-10-23	256	21.5	< 10.2	48.9	---	---	59.2	---	---	366	0.056	---	---	0.74
WQ0666	1995-11-02	279	< 18.0	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-12-18	284	< 18.0	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-01-30	307	< 18.0	< 10.2	48.1	---	---	69.3	---	---	405	0.005	---	---	0.05
WQ0666	1996-02-28	342	< 18.0	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-03-19	350	< 18.0	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-04-16	13.3	< 0.60	< 0.34	2.7	---	---	1.0	---	---	10.8	0.01	---	---	0.06
WQ0666	1996-05-13	130	< 18.0	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-06-17	179	18.3	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-07-15	205	26.1	< 10.2	42.3	---	---	46.4	---	---	297	< 0.005	---	---	0.01
WQ0666	1996-08-20	197	22.3	< 10.2	37.3	---	---	43.7	---	---	---	0.014	---	---	0.04

Appendix 1. (Continued).

Site	Sample Date	Bicarbonate Alkalinity mg/L	Carbonate Alkalinity mg/L	Hydroxide Alkalinity mg/L	Calcium Extractable mg/L	Calcium Total mg/L	Calcium Dissolved mg/L	Magnesium Extractable mg/L	Magnesium Total mg/L	Magnesium Dissolved mg/L	Hardness $(CsCO_3)$ mg/L	Manganese Extractable mg/L	Manganese Total mg/L	Manganese Dissolved mg/L	Iron Extractable mg/L
WQ0666	1996-09-24	201	23	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-10-28	234	< 18.0	< 10.2	46.6	---	---	51.2	---	---	---	0.032	---	---	0.19
WQ0666	1996-11-19	256	< 18.0	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-12-10	283	18.4	< 10.2	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-01-28	313	< 18	< 10.2	50.7	---	---	60.5	---	---	---	0.054	---	---	0.05
WQ0666	1997-02-25	320	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-03-25	325	< 20	< 10	52.6	---	---	59.7	---	---	---	0.079	---	---	0.08
WQ0666	1997-04-27	< 40	< 20	< 10	10.5	---	---	3.1	---	---	---	0.005	---	---	0.02
WQ0666	1997-05-27	201	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-06-30	213	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-07-29	199	24	< 10	38.6	---	---	52.6	---	---	---	0.021	---	---	0.14
WQ0666	1997-08-26	191	23	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-09-23	211	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-10-29	247	< 20	< 10	41.6	40.7	34.7	50.1	49.6	50.2	---	0.045	0.0480	< 0.005	0.60
WQ0666	1997-11-25	278	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-12-16	269	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-01-27	310	< 20	< 10	48.0	47.7	48.3	66.2	66.3	66.5	---	0.012	0.0120	0.007	0.03
WQ0666	1998-02-24	276	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-03-30	295	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-04-18	202	< 20	< 10	33.0	33.5	33.8	38.0	38.2	39.6	---	0.024	0.0250	< 0.005	0.17
WQ0666	1998-05-26	227	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-06-23	234	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-07-28	209	20	< 10	---	42.9	---	---	57.3	---	---	---	0.0369	---	---
WQ0666	1998-08-26	222	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-09-29	227	20	< 10	---	34.6	---	---	62.8	---	---	---	0.0047	---	---
WQ0666	1998-10-27	255	< 20	< 10	---	45.3	---	---	67.2	---	---	---	0.0278	---	---
WQ0666	1998-11-24	283	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-12-16	277	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-01-26	341	< 20	< 10	---	54.2	---	---	81.3	---	---	---	0.0058	---	---
WQ0666	1999-02-23	351	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-03-23	255	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-04-27	216	< 20	< 10	---	42.4	---	---	41.4	---	---	---	0.0531	---	---
WQ0666	1999-05-25	245	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-06-28	259	20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-07-27	221	27	< 10	---	44.6	---	---	59	---	---	---	0.0273	---	---
WQ0666	1999-08-31	218	21	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-09-28	218	24	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-11-02	249	< 20	< 10	---	53.7	---	---	52.4	---	---	---	0.0692	---	---
WQ0666	1999-11-30	289	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-12-21	307	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-01-25	346	< 20	< 10	---	55.6	---	---	77.7	---	---	---	0.0056	---	---
WQ0666	2000-02-29	337	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-03-21	222	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-04-25	202	< 20	< 10	---	34.9	---	---	47.6	---	---	---	0.0109	---	---
WQ0666	2000-05-29	230	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-06-27	215	23	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-07-26	213	20	< 10	---	37.8	---	---	52.5	---	---	---	0.0162	---	---
WQ0666	2000-08-29	204	25	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-09-27	229	20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-10-31	255	< 20	< 10	---	43.4	---	---	56.5	---	---	---	0.0300	---	---
WQ0666	2000-11-28	285	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-12-19	314	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-01-30	333	< 20	< 10	---	52.1	---	---	71.3	---	---	---	0.0210	---	---
WQ0666	2001-02-27	347	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-03-26	398	< 20	< 10	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-04-30	215	< 0.5	< 0.5	---	37.2	---	---	35.2	---	---	---	0.0490	---	---
WQ0666	2001-05-30	247	2.9	< 0.5	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-06-27	255	2.9	< 0.5	---	44.8	---	---	47.2	---	---	---	0.0600	---	---
WQ0666	2001-07-30	274	8.5	< 0.5	---	37.6	---	---	43.4	---	---	---	0.0450	---	---
WQ0666	2001-08-28	261	< 0.5	< 0.5	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-09-26	253	9.8	< 0.5	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-10-31	283	< 0.5	< 0.5	---	44.4	---	---	56.1	---	---	---	0.0340	---	---
WQ0666	2001-11-30	298	1.9	< 0.5	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-12-18	310	< 0.5	< 0.5	---	---	---	---	---	---	---	---	---	---	---
WQ1094	1994-08-30	224	27.5	< 10.2	38.0	---	---	64.6	---	---	361	0.03	---	---	0.24
WQ1436	1998-07-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1744	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1745	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1746	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 1. (Continued).

Site	Sample Date	Iron Total mg/L	Iron Dissolved mg/L	Potassium Extractable mg/L	Potassium Total mg/L	Potassium Dissolved mg/L	Sodium Extractable mg/L	Sodium Total mg/L	Sodium Dissolved mg/L	Chloride mg/L	Fluoride mg/L	Sulphate mg/L	Boron Extractable mg/L	Boron Soluble mg/L	Dissolved Oxygen mg/L	B.O.D. mg/L	Total Carbon mg/L
WQ0080	1973-06-18	---	---	13.3	---	---	193.0	---	---	330	---	98	---	---	9.0	1.3	---
WQ0080	1973-08-08	---	---	---	---	---	200.0	---	---	320	0.37	75	---	---	8.0	1.5	---
WQ0080	1974-02-28	---	---	---	---	---	310.0	---	---	470	---	110	---	---	---	---	---
WQ0080	1974-06-20	---	---	11.0	---	---	160.0	---	---	260	---	50	---	---	8.5	1.2	---
WQ0080	1974-09-18	---	---	10.0	---	---	180.0	---	---	300	---	74	---	---	7.3	0.9	---
WQ0080	1975-03-12	---	---	15.0	---	---	140.0	---	---	400	---	120	---	---	---	0.5	---
WQ0080	1975-06-03	---	---	9.8	---	---	140.0	---	---	210	---	75	---	---	7.9	1.6	---
WQ0080	1975-09-25	---	---	9.7	---	---	180.0	---	---	270	---	75	---	---	---	0.8	---
WQ0080	1976-01-28	---	---	14.0	---	---	240.0	---	---	400	---	110	---	---	9.8	0.1	---
WQ0080	1976-06-28	---	---	9.3	---	---	150.0	---	---	200	---	70	---	---	8.5	1.0	---
WQ0080	1976-08-16	---	---	10.0	---	---	140.0	---	---	230	---	70	---	---	8.5	< 0.1	---
WQ0080	1976-10-12	---	---	10.0	---	---	150.0	---	---	250	---	75	---	---	11.2	< 1.0	---
WQ0080	1977-02-28	---	---	14.0	---	---	230.0	---	---	350	---	105	---	---	---	2.8	---
WQ0080	1977-05-30	---	---	11.0	---	---	160.0	---	---	230	---	75	---	---	8.3	0.7	---
WQ0080	1977-09-19	---	---	10.5	---	---	178.0	---	---	270	---	75	---	---	9.6	1.8	---
WQ0079	1973-06-18	---	---	13.4	---	---	197.0	---	---	335	---	107	---	---	9.1	1.4	---
WQ0079	1973-08-08	---	---	---	---	---	204.0	---	---	340	0.40	85	---	---	7.9	1.3	---
WQ0079	1974-02-28	---	---	---	---	---	270.0	---	---	430	---	105	---	---	---	---	---
WQ0079	1974-06-20	---	---	16.0	---	---	220.0	---	---	350	---	100	---	---	9.1	2.5	---
WQ0079	1974-09-18	---	---	11.0	---	---	180.0	---	---	305	---	82	---	---	6.8	1.4	---
WQ0079	1975-03-12	---	---	15.0	---	---	140.0	---	---	390	---	115	---	---	---	0.6	---
WQ0079	1975-06-03	---	---	13.0	---	---	190.0	---	---	290	---	90	---	---	---	1.4	---
WQ0079	1975-09-25	---	---	9.2	---	---	170.0	---	---	250	---	70	---	---	---	0.7	---
WQ0079	1976-01-28	---	---	14.0	---	---	220.0	---	---	370	---	105	---	---	13.8	0.7	---
WQ0079	1976-06-28	---	---	11.0	---	---	180.0	---	---	250	---	80	---	---	8.6	1.0	---
WQ0079	1976-08-16	---	---	12.0	---	---	180.0	---	---	280	---	80	---	---	8.6	< 0.1	---
WQ0079	1976-10-12	---	---	11.0	---	---	160.0	---	---	270	---	75	---	---	9.7	< 1.0	---
WQ0079	1977-02-28	---	---	13.0	---	---	210.0	---	---	330	---	100	---	---	---	2.9	---
WQ0079	1977-05-30	---	---	12.0	---	---	170.0	---	---	250	---	85	---	---	8.2	1.9	---
WQ0079	1977-09-19	---	---	11.1	---	---	178.0	---	---	260	---	83	---	---	9.6	1.3	---
WQ0079	1994-08-29	---	---	12.0	---	---	231.0	---	---	369	---	110	---	---	11.2	---	---
WQ0078	1973-06-18	---	---	15.5	---	---	221.0	---	---	380	---	105	---	---	8.8	1.3	---
WQ0078	1973-08-08	---	---	---	---	---	228.0	---	---	370	0.43	115	---	---	8.0	1.8	---
WQ0078	1974-02-28	---	---	---	---	---	303.0	---	---	450	---	130	---	---	---	---	---
WQ0078	1974-06-20	---	---	17.0	---	---	230.0	---	---	360	---	100	---	---	9.1	2.4	---
WQ0078	1974-09-18	---	---	16.0	---	---	240.0	---	---	390	---	125	---	---	7.8	1.0	---
WQ0078	1975-03-12	---	---	19.0	---	---	290.0	---	---	460	---	145	---	---	---	0.6	---
WQ0078	1975-06-03	---	---	15.0	---	---	210.0	---	---	320	---	105	---	---	11.0	1.5	---
WQ0078	1975-09-25	---	---	14.0	---	---	120.0	---	---	330	---	105	---	---	---	0.8	---
WQ0078	1976-01-28	---	---	19.0	---	---	280.0	---	---	460	---	150	---	---	13.9	< 0.1	---
WQ0078	1976-06-28	---	---	16.0	---	---	210.0	---	---	290	---	120	---	---	8.3	1.0	---
WQ0078	1976-08-16	---	---	17.0	---	---	220.0	---	---	330	---	130	---	---	8.3	0.3	---
WQ0078	1976-10-12	---	---	16.0	---	---	210.0	---	---	360	---	125	---	---	10.6	< 1.0	---
WQ0078	1977-02-28	---	---	18.0	---	---	260.0	---	---	410	---	155	---	---	---	2.0	---
WQ0078	1977-05-30	---	---	15.0	---	---	210.0	---	---	290	---	110	---	---	8.7	2.1	---
WQ0078	1977-07-11	---	---	13.7	---	---	205.0	---	---	320	---	110	---	---	7.9	1.3	---
WQ0078	1977-09-19	---	---	16.2	---	---	208.0	---	---	310	---	107	---	---	9.6	1.3	---
WQ0078	1978-08-08	---	---	---	---	---	228.0	---	---	370	0.43	115	---	---	8.0	1.8	---
WQ0078	1994-08-29	---	---	13.6	---	---	248.0	---	---	391	---	130	---	---	9.2	---	---
WQ0077	1973-06-18	---	---	25.0	---	---	280.0	---	---	480	---	180	---	---	8.9	1.5	---
WQ0077	1973-08-08	---	---	---	---	---	280.0	---	---	460	0.46	165	---	---	8.0	1.9	---
WQ0077	1974-02-28	---	---	---	---	---	375.0	---	---	570	---	225	---	---	---	---	---
WQ0077	1974-06-20	---	---	28.0	---	---	310.0	---	---	470	---	180	---	---	8.9	2.7	---
WQ0077	1974-09-18	---	---	19.0	---	---	260.0	---	---	400	---	150	---	---	8.5	1.0	---
WQ0077	1975-03-12	---	---	32.0	---	---	380.0	---	---	600	---	255	---	---	---	0.6	---
WQ0077	1975-06-03	---	---	24.0	---	---	280.0	---	---	420	---	180	---	---	8.1	2.2	---
WQ0077	1975-09-25	---	---	18.0	---	---	270.0	---	---	390	---	150	---	---	---	0.9	---
WQ0077	1976-01-28	---	---	25.0	---	---	320.0	---	---	520	---	205	---	---	12.5	0.6	---
WQ0077	1976-06-28	---	---	20.0	---	---	260.0	---	---	350	---	155	---	---	---	1.2	---
WQ0077	1976-08-16	---	---	24.0	---	---	260.0	---	---	400	---	175	---	---	---	0.2	---
WQ0077	1976-10-12	---	---	20.0	---	---	230.0	---	---	380	---	160	---	---	10.4	< 1.0	---
WQ0077	1977-02-28	---	---	24.0	---	---	310.0	---	---	460	---	215	---	---	---	1.7	---
WQ0077	1977-05-30	---	---	19.0	---	---	230.0	---	---	310	---	155	---	---	8.5	1.3	---
WQ0077	1977-07-11	---	---	18.0	---	---	222.0	---	---	240	---	160	---	---	7.8	2.3	---
WQ0077	1977-09-19	---	---	17.0	---	---	232.0	---	---	330	---	152	---	---	9.6	1.5	---
WQ0077	1994-08-30	---	---	18.8	---	---	256.0	---	---	414	---	176	---	---	8.4	---	---
WQ0076	1973-08-08	---	---	---	---	---	280.0	---	---	470	0.44	180	---	---	8.4	2.1	---
WQ0076	1975-03-12	---	---	26.0	---	---	340.0	---	---	530	---	228	---	---	---	0.1	---
WQ0076	1975-06-03	---	---	21.0	---	---	260.0	---	---	400	---	170	---	---	9.4	0.8	---
WQ0076	1975-09-25	---	---	19.0	---	---	280.0	---	---	400	---	155	---	---	---	0.9	---
WQ0076	1976-01-28	---	---	24.0	---	---	310.0	---	---	510	---	190	---	---	13.7	0.1	---
WQ0076	1976-06-28	---	---	17.0	---	---	190.0	---	---	250	---	140	---	---	8.9	1.2	---
WQ0076	1976-08-16	---	---	18.0	---	---	190.0	---	---	280	---	145	---	---	8.9	1.6	---
WQ0076	1976-10-12	---	---	20.0	---	---	220.0	---	---	370	---	160	---	---	10.0	< 1.0	---
WQ0076	1977-02-28	---	---	22.0	---	---	280.0	---	---	410	---	200	---	---	---	1.5	---
WQ0076	1977-05-30	---	---	18.0	---	---	210.0	---	---	310	---	150	---	---	8.6	1.1	---
WQ0076	1977-09-19	---	---	18.0	---	---	235.0	---	---	325	---	164	---	---	9.5	2.7	---

Appendix 1. (Continued).

Site	Sample Date	Iron Total mg/L	Iron Dissolved mg/L	Potassium Extractable mg/L	Potassium Total mg/L	Potassium Dissolved mg/L	Sodium Extractable mg/L	Sodium Total mg/L	Sodium Dissolved mg/L	Chloride mg/L	Fluoride mg/L	Sulphate mg/L	Boron Extractable mg/L	Boron Soluble mg/L	Dissolved Oxygen mg/L	B.O.D. mg/L	Total Carbon mg/L
WQ0076	1994-08-30	---	---	20.8	---	---	252.0	---	---	400	---	206	---	---	10.7	---	---
WQ0597	1980-1983	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0597	1994-08-29	---	---	18.9	---	---	275.0	---	---	412	---	198	---	---	8.4	---	---
WQ0075	1973-08-08	---	---	---	---	---	280.0	---	---	460	0.43	170	---	---	7.7	1.8	---
WQ0075	1974-02-28	---	---	---	---	---	375.0	---	---	570	---	260	---	---	---	---	---
WQ0075	1974-06-20	---	---	16.0	---	---	170.0	---	---	215	---	110	---	---	8.7	3.0	---
WQ0075	1975-03-12	---	---	26.0	---	---	350.0	---	---	540	---	230	---	---	---	0.4	---
WQ0075	1975-06-03	---	---	18.0	---	---	190.0	---	---	260	---	165	---	---	---	1.1	---
WQ0075	1975-09-25	---	---	18.2	---	---	150.0	---	---	360	---	148	---	---	---	0.8	---
WQ0075	1976-01-28	---	---	24.0	---	---	310.0	---	---	500	---	195	---	---	14.5	< 0.1	---
WQ0075	1976-06-28	---	---	15.0	---	---	160.0	---	---	200	---	120	---	---	8.9	1.5	---
WQ0075	1976-08-16	---	---	19.0	---	---	220.0	---	---	330	---	145	---	---	8.9	0.3	---
WQ0075	1976-10-12	---	---	19.0	---	---	200.0	---	---	330	---	155	---	---	9.9	< 1.0	---
WQ0075	1977-02-28	---	---	23.0	---	---	280.0	---	---	410	---	210	---	---	---	< 1.0	---
WQ0075	1977-05-30	---	---	18.0	---	---	220.0	---	---	310	---	150	---	---	8.4	1.6	---
WQ0666	1991-08-20	---	---	---	---	---	---	---	---	454	---	---	---	---	---	---	---
WQ0666	1991-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---	9.4	---	---
WQ0666	1991-10-23	---	---	17.5	---	---	255.0	---	---	418	---	168	---	0.22	12.0	---	---
WQ0666	1991-11-20	---	---	---	---	---	---	---	---	---	---	---	---	---	12.6	---	---
WQ0666	1991-12-11	---	---	---	---	---	---	---	---	---	---	---	---	---	11.0	---	---
WQ0666	1992-01-21	---	---	21.3	---	---	323.0	---	---	502	---	212	---	0.29	11.5	---	83.0
WQ0666	1992-02-18	---	---	---	---	---	---	---	---	---	---	---	---	---	10.5	---	86.5
WQ0666	1992-03-10	---	---	---	---	---	---	---	---	---	---	---	---	---	9.8	---	85.0
WQ0666	1992-04-08	---	---	7.0	---	---	28.2	---	---	20	---	74	---	0.05	9.6	---	39.0
WQ0666	1992-05-25	---	---	---	---	---	---	---	---	297	---	---	---	---	10.9	---	62.0
WQ0666	1992-06-15	---	---	---	---	---	---	---	---	---	---	---	---	---	8.7	---	65.5
WQ0666	1992-07-13	---	---	15.5	---	---	227.0	---	---	334	---	169	---	0.22	8.1	---	67.0
WQ0666	1992-08-18	---	---	---	---	---	---	---	---	---	---	---	---	---	7.3	---	69.0
WQ0666	1992-09-15	---	---	---	---	---	---	---	---	357	---	180	---	---	9.4	---	67.5
WQ0666	1992-10-07	---	---	19.2	---	---	248.0	---	---	380	---	173	---	0.24	10.0	---	76.5
WQ0666	1992-11-17	---	---	---	---	---	---	---	---	413	---	176	---	---	11.1	---	75.5
WQ0666	1992-12-08	---	---	---	---	---	---	---	---	408	---	190	---	---	11.3	---	77.0
WQ0666	1993-01-12	---	---	21.6	---	---	300.0	---	---	459	---	240	---	0.31	6.8	---	76.5
WQ0666	1993-02-09	---	---	23.7	---	---	---	---	---	482	---	---	---	---	11.0	---	77.0
WQ0666	1993-03-16	---	---	---	---	---	---	---	---	---	---	---	---	---	9.1	---	93.0
WQ0666	1993-04-14	---	---	< 5.0	---	---	41.1	---	---	67	---	24	---	< 0.05	9.0	---	22.0
WQ0666	1993-05-18	---	---	---	---	---	---	---	---	---	---	---	---	---	9.5	---	68.0
WQ0666	1993-06-15	---	---	---	---	---	---	---	---	---	---	---	---	---	9.6	---	67.0
WQ0666	1993-07-13	---	---	17.3	---	---	244.0	---	---	357	---	193	---	0.20	9.9	---	67.5
WQ0666	1993-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	9.2	---	66.0
WQ0666	1993-09-14	---	---	---	---	---	---	---	---	---	---	---	---	---	9.6	---	74.0
WQ0666	1993-10-12	---	---	15.1	---	---	17.0	---	---	375	---	184	---	0.23	12.0	---	71.5
WQ0666	1993-11-16	---	---	---	---	---	---	---	---	---	---	---	---	---	12.0	---	78.0
WQ0666	1993-12-07	---	---	---	---	---	---	---	---	---	---	---	---	---	13.1	---	75.0
WQ0666	1994-01-25	---	---	20.3	---	---	344.0	---	---	484	---	260	---	0.27	11.5	---	80.5
WQ0666	1994-02-15	---	---	---	---	---	---	---	---	---	---	---	---	---	10.2	---	91.0
WQ0666	1994-03-15	---	---	13.8	---	---	---	---	---	---	---	---	---	0.20	[illegible]	---	68.0
WQ0666	1994-04-12	---	---	< 5.0	---	---	26.0	---	---	41	---	18	---	< 0.05	10.2	---	13.0
WQ0666	1994-05-24	---	---	---	---	---	---	---	---	---	---	---	---	---	7.6	---	74.0
WQ0666	1994-06-14	---	---	---	---	---	---	---	---	---	---	---	---	---	6.9	---	58.0
WQ0666	1994-07-12	---	---	18.5	---	---	250.0	---	---	376	---	181	---	0.23	7.4	---	60.5
WQ0666	1994-08-15	---	---	---	---	---	---	---	---	---	---	---	---	---	7.3	---	61.8
WQ0666	1994-09-12	---	---	---	---	---	---	---	---	---	---	---	---	---	8.3	---	72.2
WQ0666	1994-10-25	---	---	18.0	---	---	268.0	---	---	398	---	202	---	0.25	11.5	---	65.9
WQ0666	1994-11-22	---	---	---	---	---	---	---	---	---	---	---	---	---	12.9	---	83.2
WQ0666	1994-12-12	---	---	---	---	---	---	---	---	---	---	---	---	---	20.2	---	74.0
WQ0666	1995-01-24	---	---	23.5	---	---	318.0	---	---	489	---	255	---	0.25	10.8	---	82.2
WQ0666	1995-02-21	---	---	---	---	---	---	---	---	---	---	---	---	---	14.5	---	91.1
WQ0666	1995-03-21	---	---	---	---	---	---	---	---	---	---	---	---	---	15.2	---	27.6
WQ0666	1995-04-17	---	---	---	---	---	---	---	---	---	---	---	---	---	11.0	---	41.2
WQ0666	1995-04-20	---	---	< 5.0	---	---	16.0	---	---	24	---	27	---	0.12	11.6	---	21.4
WQ0666	1995-05-17	---	---	---	---	---	---	---	---	---	---	---	---	---	8.9	---	55.4
WQ0666	1995-06-13	---	---	---	---	---	---	---	---	---	---	---	---	---	8.9	---	59.7
WQ0666	1995-07-11	---	---	11.6	---	---	194.0	---	---	280	---	166	---	0.18	5.9	---	64.2
WQ0666	1995-08-15	---	---	---	---	---	---	---	---	281	---	159	---	---	8.8	---	63.7
WQ0666	1995-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	9.8	---	65.0
WQ0666	1995-10-23	---	---	17.5	---	---	232.0	---	---	360	---	193	0.19	---	8.7	---	65.7
WQ0666	1995-11-02	---	---	---	---	---	---	---	---	---	---	---	---	---	12.3	---	71.7
WQ0666	1995-12-18	---	---	---	---	---	---	---	---	---	---	---	---	---	10.8	---	80.3
WQ0666	1996-01-30	---	---	20.8	---	---	282.0	---	---	414	---	218	0.22	---	11.5	---	82.5
WQ0666	1996-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	8.5	---	79.8
WQ0666	1996-03-19	---	---	---	---	---	---	---	---	---	---	---	---	---	7.3	---	82.6
WQ0666	1996-04-16	---	---	< 1.00	---	---	1.7	---	---	< 10.	---	< 10.	< 0.05	---	11.2	---	1.9
WQ0666	1996-05-13	---	---	---	---	---	---	---	---	---	---	---	---	---	13.2	---	42.5
WQ0666	1996-06-17	---	---	---	---	---	---	---	---	187	---	---	---	---	7.8	---	49.8
WQ0666	1996-07-15	---	---	14.5	---	---	172.0	---	---	264	---	165	0.14	---	8.4	---	59.3
WQ0666	1996-08-20	---	---	14.0	---	---	164.0	---	---	238	---	152	---	---	8.8	---	53.5

Appendix 1. (Continued).

Site	Sample Date	Iron Total mg/L	Iron Dissolved mg/L	Potassium Extractable mg/L	Potassium Total mg/L	Potassium Dissolved mg/L	Sodium Extractable mg/L	Sodium Total mg/L	Sodium Dissolved mg/L	Chloride mg/L	Fluoride mg/L	Sulphate mg/L	Boron Extractable mg/L	Boron Soluble mg/L	Dissolved Oxygen mg/L	B.O.D. mg/L	Total Carbon mg/L
WQ0666	1996-09-24	---	---	---	---	---	---	---	---	---	---	---	---	---	9.4	---	60.2
WQ0666	1996-10-28	---	---	15.7	---	---	187.0	---	---	263	---	---	---	---	10.7	---	61.2
WQ0666	1996-11-19	---	---	---	---	---	---	---	---	---	---	---	---	---	12.3	---	64.9
WQ0666	1996-12-10	---	---	---	---	---	---	---	---	---	---	---	---	---	3.9	---	67.4
WQ0666	1997-01-28	---	---	18.2	---	---	228.0	---	---	336	---	238	---	---	9.0	---	79.8
WQ0666	1997-02-25	---	---	---	---	---	---	---	---	---	---	---	---	---	6.9	---	78.8
WQ0666	1997-03-25	---	---	17.1	---	---	216.0	---	---	335	---	176	---	---	5.9	---	81.1
WQ0666	1997-04-27	---	---	0.7	---	---	8.4	---	---	12	---	< 10	---	---	13.4	---	9.4
WQ0666	1997-05-27	---	---	---	---	---	---	---	---	---	---	---	---	---	10.5	---	55.0
WQ0666	1997-06-30	---	---	---	---	---	---	---	---	---	---	---	---	---	8.1	---	58.0
WQ0666	1997-07-29	---	---	15.6	---	---	178.0	---	---	281	---	141	---	---	8.3	---	59.0
WQ0666	1997-08-26	---	---	---	---	---	---	---	---	---	---	---	---	---	7.5	---	57.0
WQ0666	1997-09-23	---	---	---	---	---	---	---	---	---	---	---	---	---	9.3	---	60.0
WQ0666	1997-10-29	1.64	< 0.01	14.7	15.2	15.2	171.0	170	178	267	---	136	---	---	12.0	---	59.0
WQ0666	1997-11-25	---	---	---	---	---	---	---	---	---	---	---	---	---	13.0	---	65.0
WQ0666	1997-12-16	---	---	---	---	---	---	---	---	---	---	---	---	---	12.2	---	70.0
WQ0666	1998-01-27	0.02	< 0.01	18.3	19.7	18.6	224.0	240	229	341	---	176	---	---	11.7	---	74.0
WQ0666	1998-02-24	---	---	---	---	---	---	---	---	---	---	---	---	---	11.7	---	66.0
WQ0666	1998-03-30	---	---	---	---	---	---	---	---	---	---	---	---	---	10.7	---	70.0
WQ0666	1998-04-18	0.29	0.01	11.6	11.6	12.0	127.0	129	131	204	---	112	---	---	11.4	---	52.0
WQ0666	1998-05-26	---	---	---	---	---	---	---	---	282	---	145	---	---	8.0	---	61.0
WQ0666	1998-06-23	---	---	---	---	---	---	---	---	---	---	---	---	---	6.5	---	61.0
WQ0666	1998-07-28	0.69	---	---	---	---	---	---	---	322	---	145	---	---	2.2	---	58.0
WQ0666	1998-08-26	---	---	---	---	---	---	---	---	---	---	---	---	---	8.2	---	62.0
WQ0666	1998-09-29	0.04	---	---	17.5	---	---	236	---	329	---	162	---	---	9.8	---	68.0
WQ0666	1998-10-27	0.77	---	---	19.0	---	---	258	---	326	---	158	---	---	11.2	---	62.0
WQ0666	1998-11-24	---	---	---	---	---	---	---	---	---	---	---	---	---	14.3	---	68.0
WQ0666	1998-12-16	---	---	---	---	---	---	---	---	---	---	---	---	---	11.5	---	72.0
WQ0666	1999-01-26	< 0.01	---	---	24.8	---	---	312	---	427	---	195	---	---	10.7	---	83.0
WQ0666	1999-02-23	---	---	---	---	---	---	---	---	---	---	---	---	---	13.9	---	84.0
WQ0666	1999-03-23	---	---	---	---	---	---	---	---	---	---	---	---	---	11.1	---	60.0
WQ0666	1999-04-27	1.19	---	---	14.4	---	---	126	---	170	---	130	---	---	11.3	---	58.0
WQ0666	1999-05-25	---	---	---	---	---	---	---	---	---	---	---	---	---	10.1	---	67.0
WQ0666	1999-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	9.4	---	71.0
WQ0666	1999-07-27	0.56	---	---	17.6	---	---	206	---	285	---	153	---	---	13.4	---	62.0
WQ0666	1999-08-31	---	---	---	---	---	---	---	---	---	---	---	---	---	9.1	---	61.0
WQ0666	1999-09-28	---	---	---	---	---	---	---	---	---	---	---	---	---	9.6	---	69.0
WQ0666	1999-11-02	1.09	---	---	17.4	---	---	187	---	310	---	154	---	---	11.1	---	69.0
WQ0666	1999-11-30	---	---	---	---	---	---	---	---	---	---	---	---	---	14.1	---	72.0
WQ0666	1999-12-21	---	---	---	---	---	---	---	---	---	---	---	---	---	14.9	---	77.0
WQ0666	2000-01-25	0.11	---	---	22.6	---	---	285	---	411	---	204	---	---	16.1	---	80.0
WQ0666	2000-02-29	---	---	---	---	---	---	---	---	---	---	---	---	---	14.4	---	79.0
WQ0666	2000-03-21	---	---	---	---	---	---	---	---	---	---	---	---	---	18.1	---	54.0
WQ0666	2000-04-25	0.14	---	---	12.8	---	---	155	---	245	---	131	---	---	12.3	---	55.0
WQ0666	2000-05-29	---	---	---	---	---	---	---	---	---	---	---	---	---	10.3	---	62.0
WQ0666	2000-06-27	---	---	---	---	---	---	---	---	---	---	---	---	---	4.7	---	62.0
WQ0666	2000-07-26	0.28	---	---	14.1	---	---	182	---	274	---	150	---	---	24.3	---	61.0
WQ0666	2000-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	8.7	---	59.0
WQ0666	2000-09-27	---	---	---	---	---	---	---	---	---	---	---	---	---	9.9	---	66.0
WQ0666	2000-10-31	0.75	---	---	17.0	---	---	201	---	332	---	164	---	---	11.4	---	66.0
WQ0666	2000-11-28	---	---	---	---	---	---	---	---	---	---	---	---	---	11.3	---	66.0
WQ0666	2000-12-19	---	---	---	---	---	---	---	---	---	---	---	---	---	11.2	---	78.0
WQ0666	2001-01-30	0.51	---	---	20.7	---	---	235	---	366	---	211	---	---	10.6	---	80.0
WQ0666	2001-02-27	---	---	---	---	---	---	---	---	---	---	---	---	---	10.0	---	81.0
WQ0666	2001-03-26	---	---	---	---	---	---	---	---	---	---	---	---	---	14.5	---	89.0
WQ0666	2001-04-30	0.85	---	---	10.6	---	---	89	---	138	---	114	---	---	4.0		55.0
WQ0666	2001-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	10.7		62.0
WQ0666	2001-06-27	0.97	---	---	12.3	---	---	139	---	197	---	132	---	---	8.3		66.0
WQ0666	2001-07-30	0.25	---	---	13.6	---	---	142	---	205	---	126	---	---	8.8		64.0
WQ0666	2001-08-28	---	---	---	---	---	---	---	---	---	---	---	---	---	9.2		63.0
WQ0666	2001-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	9.3		69.0
WQ0666	2001-10-31	0.69	---	---	15.1	---	---	205	---	280	---	156	---	---	9.8		68.0
WQ0666	2001-11-30	---	---	---	---	---	---	---	---	---	---	---	---	---	13.3		73.0
WQ0666	2001-12-18	---	---	---	---	---	---	---	---	---	---	---	---	---	9.8		76.0
WQ1094	1994-08-30	---	---	21.5	---	---	251.0	---	---	402	---	206	---	---	11.0	---	---
WQ1436	1998-07-02	---	---	---	---	---	---	---	---	---	---	---	---	---	11.9	---	36.0
WQ1744	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1745	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1746	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 1. (Continued).

Site	Sample Date	Total Organic Carbon mg/L	Total Inorganic Carbon mg/L	Total Kjeldahl Nitrogen mg/L	Total Kjeldahl Nitrogen Dissolved mg/L	Total Kjeldahl Nitrogen Particulate mg/L	Nitrate-Nitrite Nitrogen mg/L	Total Ammonia Nitrogen mg/L	Total Phosphorus mg/L	Total Particulate Phosphorus mg/L	Total Dissolved Phosphorus mg/L	Ortho Phosphorus mg/L	Silica mg/L	Arsenic Total mg/L
WQ0080	1973-06-18	20.5	18.5	0.80	---	---	< 0.10	0.130	< 0.020	---	---	---	---	---
WQ0080	1973-08-08	---	---	0.80	---	---	0.18	0.070	0.020	---	---	---	---	---
WQ0080	1974-02-28	18.0	---	---	---	---	0.03	---	0.060	---	---	---	---	---
WQ0080	1974-06-20	18.0	32.5	---	---	---	0.17	< 0.020	0.020	---	---	0.020	---	---
WQ0080	1974-09-18	16.0	26.5	0.80	---	---	0.12	< 0.020	< 0.020	---	---	< 0.020	---	---
WQ0080	1975-03-12	17.0	49.5	0.90	---	---	0.11	0.190	0.040	---	---	0.020	---	---
WQ0080	1975-06-03	11.5	33.5	1.40	---	---	0.12	0.040	< 0.020	---	---	< 0.020	---	---
WQ0080	1975-09-25	14.5	37.0	0.80	---	---	0.17	< 0.020	0.020	---	---	< 0.020	---	---
WQ0080	1976-01-28	14.0	47.0	0.80	---	---	0.02	0.060	< 0.020	---	---	< 0.020	---	---
WQ0080	1976-06-28	14.5	32.5	0.70	---	---	0.05	0.280	< 0.020	---	---	< 0.020	---	---
WQ0080	1976-08-16	15.5	35.5	0.80	---	---	0.01	0.030	< 0.020	---	---	< 0.020	---	---
WQ0080	1976-10-12	17.5	36.0	0.80	---	---	< 0.01	< 0.020	0.040	---	---	< 0.020	---	---
WQ0080	1977-02-28	21.5	51.0	1.00	---	---	0.02	0.170	< 0.020	---	---	< 0.020	---	---
WQ0080	1977-05-30	17.0	33.0	0.70	---	---	0.06	0.020	0.020	---	---	< 0.020	---	---
WQ0080	1977-09-19	18.5	31.5	0.90	---	---	0.09	< 0.020	0.030	---	---	0.007	---	---
WQ0079	1973-06-18	23.5	20.5	0.90	---	---	< 0.10	0.120	< 0.020	---	---	---	---	---
WQ0079	1973-08-08	---	---	0.80	---	---	0.20	< 0.0500	< 0.020	---	---	---	---	---
WQ0079	1974-02-28	20.0	---	---	---	---	0.02	---	< 0.020	---	---	---	---	---
WQ0079	1974-06-20	15.5	37.0	---	---	---	< 0.01	0.100	0.030	---	---	0.030	---	---
WQ0079	1974-09-18	16.0	28.0	0.90	---	---	0.17	< 0.020	0.020	---	---	< 0.020	---	---
WQ0079	1975-03-12	19.5	43.0	0.80	---	---	0.04	0.080	0.040	---	---	0.020	---	---
WQ0079	1975-06-03	13.0	40.0	0.80	---	---	0.74	0.040	0.050	---	---	< 0.020	---	---
WQ0079	1975-09-25	14.0	37.0	0.70	---	---	0.03	< 0.020	< 0.020	---	---	< 0.020	---	---
WQ0079	1976-01-28	17.5	42.0	0.80	---	---	0.02	0.050	< 0.020	---	---	< 0.020	---	---
WQ0079	1976-06-28	16.0	35.5	0.80	---	---	0.05	0.080	< 0.020	---	---	< 0.020	---	---
WQ0079	1976-08-16	21.0	37.0	1.20	---	---	0.01	0.040	< 0.020	---	---	< 0.020	---	---
WQ0079	1976-10-12	18.5	35.5	0.70	---	---	0.01	0.030	0.020	---	---	< 0.020	---	---
WQ0079	1977-02-28	20.0	47.5	1.00	---	---	0.02	0.220	< 0.020	---	---	< 0.020	---	---
WQ0079	1977-05-30	18.0	23.5	0.90	---	---	0.03	0.090	0.060	---	---	< 0.020	---	---
WQ0079	1977-09-19	19.0	35.0	0.85	---	---	< 0.01	< 0.020	0.017	---	---	0.006	---	---
WQ0079	1994-08-29	---	---	1.86	---	---	< 0.01	0.021	0.025	---	0.006	---	4.1	0.001
WQ0078	1973-06-18	21.0	19.5	1.00	---	---	< 0.10	0.130	0.020	---	---	---	---	---
WQ0078	1973-08-08	---	---	1.00	---	---	0.15	0.080	< 0.020	---	---	---	---	---
WQ0078	1974-02-28	20.0	---	---	---	---	0.02	---	< 0.020	---	---	---	---	---
WQ0078	1974-06-20	18.5	39.0	---	---	---	< 0.01	0.120	0.020	---	---	< 0.020	---	---
WQ0078	1974-09-18	21.0	32.5	1.00	---	---	0.13	0.020	0.020	---	---	< 0.020	---	---
WQ0078	1975-03-12	20.0	49.5	1.00	---	---	0.03	0.200	0.030	---	---	< 0.020	---	---
WQ0078	1975-06-03	16.5	40.5	1.00	---	---	0.16	0.040	0.020	---	---	< 0.020	---	---
WQ0078	1975-09-25	16.5	46.0	1.00	---	---	0.27	< 0.020	< 0.020	---	---	< 0.020	---	---
WQ0078	1976-01-28	18.5	45.5	1.10	---	---	0.03	0.100	0.020	---	---	< 0.020	---	---
WQ0078	1976-06-28	17.0	39.0	1.80	---	---	0.09	0.110	0.030	---	---	< 0.020	---	---
WQ0078	1976-08-16	16.0	42.0	0.90	---	---	0.01	0.020	< 0.020	---	---	< 0.020	---	---
WQ0078	1976-10-12	21.0	43.0	1.00	---	---	0.01	0.060	0.020	---	---	< 0.020	---	---
WQ0078	1977-02-28	23.5	54.5	1.30	---	---	0.06	0.360	< 0.020	---	---	< 0.020	---	---
WQ0078	1977-05-30	20.5	36.5	1.00	---	---	0.61	0.040	0.020	---	---	< 0.020	---	---
WQ0078	1977-07-11	26.0	40.5	1.30	---	---	0.66	< 0.020	0.041	---	---	0.013	---	---
WQ0078	1977-09-19	21.0	38.5	1.00	---	---	0.02	< 0.020	0.020	---	---	0.006	---	---
WQ0078	1978-08-08	---	---	1.00	---	---	0.15	0.080	< 0.020	---	---	---	---	---
WQ0078	1994-08-29	---	---	1.86	---	---	< 0.01	< 0.020	0.050	---	0.010	---	4.7	0.001
WQ0077	1973-06-18	28.0	37.5	1.20	---	---	< 0.10		0.030	---	---	---	---	---
WQ0077	1973-08-08	---	---	1.10	---	---	0.20	0.070	< 0.020	---	---	---	---	---
WQ0077	1974-02-28	22.5	---	---	---	---	0.05	---	0.020	---	---	---	---	---
WQ0077	1974-06-20	22.0	53.0	---	---	---	0.01	< 0.020	0.030	---	---	< 0.020	---	---
WQ0077	1974-09-18	20.0	38.0	1.10	---	---	0.09	0.020	0.030	---	---	< 0.020	---	---
WQ0077	1975-03-12	21.5	69.5	1.20	---	---	0.03	0.050	0.030	---	---	0.020	---	---
WQ0077	1975-06-03	15.0	54.5	1.20	---	---	0.09	0.030	0.020	---	---	< 0.020	---	---
WQ0077	1975-09-25	23.0	56.0	1.10	---	---	0.04	< 0.020	0.040	---	---	< 0.020	---	---
WQ0077	1976-01-28	17.0	57.5	1.10	---	---	0.04	0.060	0.020	---	---	< 0.020	---	---
WQ0077	1976-06-28	22.0	49.0	1.10	---	---	0.15	0.030	< 0.020	---	---	< 0.020	---	---
WQ0077	1976-08-16	17.0	57.5	1.10	---	---	0.04	0.020	0.040	---	---	< 0.020	---	---
WQ0077	1976-10-12	21.0	52.0	1.00	---	---	0.06	0.030	0.030	---	---	< 0.020	---	---
WQ0077	1977-02-28	20.5	69.0	1.30	---	---	0.74	0.190	0.020	---	---	< 0.020	---	---
WQ0077	1977-05-30	19.5	45.5	0.90	---	---	0.03	0.040	0.020	---	---	< 0.020	---	---
WQ0077	1977-07-11	28.0	50.5	1.30	---	---	0.02	< 0.020	0.080	---	---	0.013	---	---
WQ0077	1977-09-19	22.0	45.5	1.10	---	---	0.09	< 0.020	0.035	---	---	0.010	---	---
WQ0077	1994-08-30	---	---	1.77	---	---	0.09	0.052	0.028	---	0.007	---	6.2	0.002
WQ0076	1973-08-08	---	---	1.10	---	---	0.22	0.070	< 0.020	---	---	---	---	---
WQ0076	1975-03-12	16.5	60.5	1.00	---	---	0.04	0.060	0.080	---	---	0.030	---	---
WQ0076	1975-06-03	15.0	51.5	1.10	---	---	0.08	0.030	0.030	---	---	< 0.020	---	---
WQ0076	1975-09-25	19.0	58.0	1.10	---	---	0.74	< 0.020	0.040	---	---	< 0.020	---	---
WQ0076	1976-01-28	16.5	54.0	1.00	---	---	0.03	0.050	0.030	---	---	0.030	---	---
WQ0076	1976-06-28	18.5	42.0	0.90	---	---	0.11	0.350	0.040	---	---	< 0.020	---	---
WQ0076	1976-08-16	24.5	45.0	1.10	---	---	0.01	0.400	0.160	---	---	< 0.020	---	---
WQ0076	1976-10-12	22.5	50.0	1.00	---	---	0.07	< 0.020	0.060	---	---	< 0.020	---	---
WQ0076	1977-02-28	21.0	59.5	1.20	---	---	0.09	0.190	0.020	---	---	< 0.020	---	---
WQ0076	1977-05-30	22.5	45.5	0.90	---	---	< 0.01	0.030	0.120	---	---	< 0.020	---	---
WQ0076	1977-09-19	26.0	47.0	1.50	---	---	0.14	0.040	0.020	---	---	0.016	---	---

Appendix 1. (Continued).

Site	Sample Date	Total Organic Carbon mg/L	Total Inorganic Carbon mg/L	Total Kjeldahl Nitrogen mg/L	Total Kjeldahl Nitrogen Dissolved mg/L	Total Kjeldahl Nitrogen Particulate mg/L	Nitrate-Nitrite Nitrogen mg/L	Total Ammonia Nitrogen mg/L	Total Phosphorus mg/L	Total Particulate Phosphorus mg/L	Total Dissolved Phosphorus mg/L	Ortho Phosphorus mg/L	Silica mg/L	Arsenic Total mg/L
WQ0076	1994-08-30	---	---	1.89	---	---	0.06	0.115	0.068	---	0.023	---	8.8	0.003
WQ0597	1980-1983	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0597	1994-08-29	---	---	1.62	---	---	< 0.01	< 0.020	0.049	---	0.015	---	8.6	0.002
WQ0075	1973-08-08	---	---	1.10	---	---	0.20	0.100	< 0.020	---	---	---	---	---
WQ0075	1974-02-28	21.0	---	---	---	---	0.05	---	0.020	---	---	---	---	---
WQ0075	1974-06-20	19.5	42.5	---	---	---	0.03	< 0.020	0.040	---	---	0.030	---	---
WQ0075	1975-03-12	17.5	58.5	1.10	---	---	0.06	0.080	0.050	---	---	0.030	---	---
WQ0075	1975-06-03	14.5	47.0	1.10	---	---	0.33	0.040	0.120	---	---	0.050	---	---
WQ0075	1975-09-25	17.0	54.0	1.10	---	---	0.07	< 0.020	0.050	---	---	< 0.020	---	---
WQ0075	1976-01-28	16.5	57.0	1.00	---	---	0.03	0.060	0.020	---	---	< 0.020	---	---
WQ0075	1976-06-28	16.0	38.5	0.90	---	---	0.02	0.020	0.040	---	---	< 0.020	---	---
WQ0075	1976-08-16	17.0	44.5	0.90	---	---	0.01	0.040	0.030	---	---	< 0.020	---	---
WQ0075	1976-10-12	23.5	50.0	1.30	---	---	0.83	0.180	0.080	---	---	0.020	---	---
WQ0075	1977-02-28	19.5	69.0	1.20	---	---	0.15	0.200	0.020	---	---	< 0.020	---	---
WQ0075	1977-05-30	18.0	47.0	0.90	---	---	0.01	0.050	0.060	---	---	< 0.020	---	---
WQ0666	1991-08-20	16.5	53.5	1.25	---	---	< 0.01	< 0.020	0.050	---	---	---	---	---
WQ0666	1991-09-19	17.5	59.5	1.85	---	---	< 0.01	< 0.020	0.095	---	---	---	---	---
WQ0666	1991-10-23	18.0	60.0	1.45	---	---	< 0.01	0.040	0.050	---	---	---	---	
WQ0666	1991-11-20	14.0	48.5	1.15	---	---	0.11	0.100	0.050	---	---	---	---	---
WQ0666	1991-12-11	16.0	64.0	1.35	---	---	0.06	0.050	0.025	---	---	---	---	---
WQ0666	1992-01-21	16.0	67.0	1.55	---	---	0.07	0.135	0.025	---	---	---	---	0.003
WQ0666	1992-02-18	16.0	70.5	1.40	---	---	0.15	0.085	0.024	---	---	---	---	---
WQ0666	1992-03-10	15.0	70.0	1.50	---	---	0.20	0.075	0.011	---	---	---	---	---
WQ0666	1992-04-08	12.0	27.0	1.56	---	---	0.37	0.051	0.344	---	---	---	---	0.004
WQ0666	1992-05-25	12.0	50.0	1.02	---	---	0.01	< 0.020	0.046	---	---	---	---	---
WQ0666	1992-06-15	18.5	47.0	1.13	---	---	< 0.01	< 0.020	0.076	---	---	---	---	---
WQ0666	1992-07-13	11.0	56.0	1.16	---	---	< 0.01	< 0.020	0.028	---	---	---	---	0.003
WQ0666	1992-08-18	11.0	58.0	0.66	---	---	< 0.01	< 0.020	0.052	---	---	---	---	---
WQ0666	1992-09-15	11.0	56.5	1.59	---	---	< 0.01	< 0.020	0.053	---	---	---	---	---
WQ0666	1992-10-07	15.5	61.0	1.87	---	---	< 0.01	< 0.020	0.049	---	---	---	---	0.003
WQ0666	1992-11-17	14.5	61.0	1.39	---	---	< 0.01	0.030	0.042	---	---	---	---	---
WQ0666	1992-12-08	12.5	64.5	1.26	---	---	0.03	0.021	0.011	---	---	---	---	---
WQ0666	1993-01-12	15.0	61.5	1.41	---	---	0.02	0.069	0.027	---	---	---	---	0.003
WQ0666	1993-02-09	12.5	64.5	1.61	---	---	0.08	0.087	0.029	---	---	---	---	---
WQ0666	1993-03-16	22.5	70.5	1.51	---	---	0.20	0.020	0.024	---	---	---	---	---
WQ0666	1993-04-14	7.5	14.5	0.74	---	---	0.48	0.091	0.077	---	0.068	---	---	< 0.001
WQ0666	1993-05-18	12.5	55.5	1.39	---	---	< 0.01	< 0.020	0.053	---	---	---	---	---
WQ0666	1993-06-15	12.0	55.0	1.32	---	---	< 0.01	< 0.020	0.048	---	---	---	---	---
WQ0666	1993-07-13	11.5	56.0	1.00	---	---	< 0.01	< 0.020	0.064	---	0.013	---	---	0.003
WQ0666	1993-08-16	13.5	52.5	1.08	---	---	< 0.01	< 0.020	0.034	0.020	0.014	---	---	---
WQ0666	1993-09-14	18.0	56.0	1.36	---	---	< 0.01	< 0.020	0.075	---	---	---	---	---
WQ0666	1993-10-12	13.0	58.5	1.24	---	---	< 0.01	< 0.020	0.072	---	---	---	---	0.003
WQ0666	1993-11-16	16.0	62.0	1.35	---	---	0.03	0.025	0.087	---	---	---	---	---
WQ0666	1993-12-07	17.0	58.0	1.31	---	---	< 0.01	< 0.020	0.031	---	---	---	---	---
WQ0666	1994-01-25	19.5	61.0	1.26	---	---	0.04	0.052	0.024	---	---	---	---	0.002
WQ0666	1994-02-15	25.0	66.0	1.27	---	---	0.03	0.042	0.030	---	---	---	---	---
WQ0666	1994-03-15	24.0	44.0	2.33	---	---	2.56	0.654	0.071	---	---	---	---	---
WQ0666	1994-04-12	6.0	7.0	0.59	---	---	0.05	0.087	0.029	---	---	---	---	< 0.001
WQ0666	1994-05-24	18.0	56.0	1.01	---	---	< 0.01	< 0.020	0.033	---	---	---	---	---
WQ0666	1994-06-14	13.0	45.0	1.21	---	---	< 0.01	< 0.020	0.037	---	---	---	---	---
WQ0666	1994-07-12	14.0	46.5	1.33	---	---	< 0.01	< 0.020	0.047	---	---	---	---	0.003
WQ0666	1994-08-15	10.3	51.5	1.45	---	---	< 0.01	< 0.020	0.083	---	---	---	---	---
WQ0666	1994-09-12	20.3	51.9	1.72	---	---	< 0.01	< 0.020	0.050	---	---	---	---	---
WQ0666	1994-10-25	24.3	41.6	2.05	---	---	< 0.01	0.151	0.092	---	---	---	---	0.003
WQ0666	1994-11-22	26.3	56.9	1.20	---	---	< 0.01	< 0.020	0.037	---	---	---	---	---
WQ0666	1994-12-12	11.1	62.9	1.16	---	---	0.01	0.026	0.032	---	---	---	---	---
WQ0666	1995-01-24	8.4	73.8	1.20	---	---	0.02	0.052	0.024	---	---	---	---	0.003
WQ0666	1995-02-21	18.7	72.4	1.08	---	---	0.04	0.072	0.025	---	---	---	---	---
WQ0666	1995-03-21	6.2	21.4	2.06	---	---	0.59	0.892	0.079	---	---	---	---	---
WQ0666	1995-04-17	6.4	34.8	1.69	---	---	0.44	0.362	0.284	---	---	---	---	---
WQ0666	1995-04-20	7.8	13.6	1.28	---	---	0.34	0.131	0.294	---	---	---	---	0.004
WQ0666	1995-05-17	19.6	35.8	1.10	---	---	0.05	0.082	0.170	---	---	---	---	---
WQ0666	1995-06-13	9.7	50.0	0.90	---	---	< 0.01	< 0.020	0.047	---	---	---	---	---
WQ0666	1995-07-11	11.8	52.4	0.94	---	---	< 0.01	< 0.020	0.035	---	---	---	---	0.003
WQ0666	1995-08-15	7.9	55.8	0.88	---	---	< 0.01	< 0.020	0.060	---	---	---	---	0.004
WQ0666	1995-09-26	13.6	51.4	1.16	---	---	< 0.01	0.020	0.040	---	---	---	---	---
WQ0666	1995-10-23	12.4	53.3	1.41	---	---	< 0.01	< 0.020	0.116	---	---	---	---	0.003
WQ0666	1995-11-02	13.7	58.0	1.01	---	---	< 0.01	< 0.020	0.033	0.024	0.009	---	---	---
WQ0666	1995-12-18	20.2	60.1	1.07	---	---	< 0.01	0.026	0.042	---	---	---	---	---
WQ0666	1996-01-30	18.0	64.5	1.10	---	---	0.32	0.068	0.023	---	---	---	---	0.003
WQ0666	1996-02-28	11.3	68.5	1.02	0.95	< 0.20	0.18	0.002	0.023	0.006	0.017	---	---	---
WQ0666	1996-03-19	13.9	68.7	1.12	---	---	0.29	< 0.020	0.024	---	---	---	---	---
WQ0666	1996-04-16	< 1.0	1.9	0.54	---	---	0.27	0.334	0.014	---	---	---	---	0.001
WQ0666	1996-05-13	10.2	32.3	0.94	0.86	< 0.20	0.07	0.020	0.160	0.122	0.038	---	---	---
WQ0666	1996-06-17	9.8	40.0	0.84	0.73	< 0.20	0.01	< 0.020	0.048	---	---	---	---	---
WQ0666	1996-07-15	11.9	47.4	1.11	0.77	0.34	< 0.01	< 0.020	0.040	0.029	0.011	---	---	0.003
WQ0666	1996-08-20	9.1	44.4	1.17	0.82	0.35	0.01	0.031	0.083	0.049	0.034	---	---	---

Appendix 1. (Continued).

Site	Sample Date	Total Organic Carbon mg/L	Total Inorganic Carbon mg/L	Total Kjeldahl Nitrogen mg/L	Total Kjeldahl Nitrogen Dissolved mg/L	Total Kjeldahl Nitrogen Particulate mg/L	Nitrate-Nitrite Nitrogen mg/L	Total Ammonia Nitrogen mg/L	Total Phosphorus mg/L	Total Particulate Phosphorus mg/L	Total Dissolved Phosphorus mg/L	Ortho Phosphorus mg/L	Silica mg/L	Arsenic Total mg/L
WQ0666	1996-09-24	13.8	46.4	1.26	0.85	0.41	< 0.01	0.021	0.082	0.058	0.024	---	---	---
WQ0666	1996-10-28	11.8	49.4	1.07	0.72	0.35	< 0.01	0.023	0.080	0.072	0.008	---	---	---
WQ0666	1996-11-19	12.4	52.5	0.99	---	---	0.03	0.042	0.046	0.028	0.018	---	---	---
WQ0666	1996-12-10	13.0	54.4	1.12	---	---	0.03	0.053	0.151	0.122	0.029	---	---	---
WQ0666	1997-01-28	18.5	61.3	0.81	---	---	0.18	0.091	0.036	0.007	0.029	---	---	---
WQ0666	1997-02-25	16.1	62.7	0.99	---	---	0.34	0.065	0.040	0.007	0.033	---	---	---
WQ0666	1997-03-25	14.0	67.1	0.88	---	---	0.39	0.021	0.038	0.007	0.031	---	---	---
WQ0666	1997-04-27	1.5	7.9	0.28	---	---	0.13	0.150	0.010	0.008	0.002	---	---	---
WQ0666	1997-05-27	10.8	44.2	0.81	---	---	< 0.01	< 0.02	0.085	0.058	0.027	---	---	---
WQ0666	1997-06-30	9.0	49.0	0.90	---	---	< 0.01	0.020	0.093	0.057	0.036	---	---	---
WQ0666	1997-07-29	13.0	46.0	1.00	---	---	< 0.01	< 0.02	0.054	0.040	0.015	---	---	---
WQ0666	1997-08-26	12.0	45.0	0.80	---	---	< 0.01	< 0.02	0.062	0.033	0.029	---	---	---
WQ0666	1997-09-23	12.0	48.0	0.70	---	---	< 0.01	0.090	0.076	0.056	0.020	---	---	---
WQ0666	1997-10-29	11.0	48.0	0.90	---	---	0.01	0.060	0.076	0.060	0.017	---	---	---
WQ0666	1997-11-25	12.0	53.0	0.90	---	---	0.06	0.060	0.045	0.037	0.008	---	---	---
WQ0666	1997-12-16	14.0	56.0	1.40	---	---	0.08	0.050	0.032	0.013	0.019	---	---	---
WQ0666	1998-01-27	13.0	61.0	1.20	---	---	0.13	0.110	0.024	0.013	0.011	---	---	---
WQ0666	1998-02-24	10.0	56.0	1.10	---	---	0.20	0.070	0.024	0.014	0.010	---	---	---
WQ0666	1998-03-30	12.0	58.0	1.10	---	---	0.27	0.050	0.047	0.031	0.016	---	---	---
WQ0666	1998-04-18	10.0	42.0	1.00	---	---	< 0.01	0.040	0.066	0.048	0.018	---	---	---
WQ0666	1998-05-26	13.0	48.0	1.00	---	---	< 0.01	< 0.02	0.037	0.024	0.013	---	---	---
WQ0666	1998-06-23	11.0	50.0	0.90	---	---	< 0.01	0.020	0.027	0.011	0.016	---	---	---
WQ0666	1998-07-28	12.0	46.0	1.40	---	---	< 0.01	0.010	0.097	0.087	0.010	---	---	---
WQ0666	1998-08-26	14.0	48.0	1.40	---	---	< 0.01	0.020	0.062	0.042	0.020	---	---	---
WQ0666	1998-09-29	18.0	50.0	1.30	---	---	< 0.01	0.010	0.077	0.057	0.020	---	---	---
WQ0666	1998-10-27	12.0	50.0	1.50	---	---	0.03	0.020	0.075	0.051	0.024	---	---	---
WQ0666	1998-11-24	15.0	53.0	1.30	---	---	0.02	0.020	0.036	0.017	0.019	---	---	---
WQ0666	1998-12-16	17.0	55.0	1.30	---	---	0.03	0.020	0.033	0.014	0.019	---	---	---
WQ0666	1999-01-26	15.0	68.0	1.20	---	---	0.06	< 0.01	0.080	0.059	0.021	---	---	---
WQ0666	1999-02-23	17.0	67.0	1.20	---	---	0.06	0.030	0.030	0.006	0.024	---	---	---
WQ0666	1999-03-23	13.0	47.0	1.10	---	---	0.31	0.140	0.030	0.013	0.017	---	---	---
WQ0666	1999-04-27	14.0	44.0	1.10	---	---	0.15	0.040	0.118	0.066	0.052	---	---	---
WQ0666	1999-05-25	15.0	52.0	1.20	---	---	< 0.01	0.020	0.090	0.070	0.020	---	---	---
WQ0666	1999-06-28	15.0	56.0	1.20	---	---	< 0.01	0.010	0.086	0.057	0.029	---	---	---
WQ0666	1999-07-27	11.0	51.0	1.20	---	---	< 0.01	< 0.01	0.063	0.047	0.016	---	---	---
WQ0666	1999-08-31	14.0	47.0	7.30	---	---	< 0.01	0.020	0.051	0.031	0.020	---	---	---
WQ0666	1999-09-28	19.0	50.0	1.50	---	---	< 0.01	0.030	0.064	0.048	0.016	---	---	---
WQ0666	1999-11-02	18.0	51.0	1.60	---	---	< 0.01	0.010	0.119	0.103	0.016	---	---	---
WQ0666	1999-11-30	12.0	60.0	1.80	---	---	0.01	0.020	0.081	0.063	0.018	---	---	---
WQ0666	1999-12-21	15.0	62.0	1.20	---	---	0.02	0.020	0.041	0.020	0.021	---	---	---
WQ0666	2000-01-25	13.0	67.0	1.20	---	---	0.11	0.030	0.030	0.013	0.017	---	---	---
WQ0666	2000-02-29	14.0	65.0	1.10	---	---	0.08	0.050	0.034	0.014	0.020	---	---	---
WQ0666	2000-03-21	12.0	42.0	1.00	---	---	0.03	0.020	0.034	0.016	0.018	---	---	---
WQ0666	2000-04-25	10.0	45.0	1.00	---	---	0.01	0.020	0.035	0.020	0.015	---	---	---
WQ0666	2000-05-29	13.0	49.0	1.00	---	---	< 0.01	0.010	0.050	0.033	0.017	---	---	---
WQ0666	2000-06-27	14.0	48.0	1.10	---	---	0.01	0.010	0.074	0.056	0.018	---	---	---
WQ0666	2000-07-26	14.0	47.0	0.70	---	---	0.03	0.010	0.042	0.028	0.014	---	---	---
WQ0666	2000-08-29	11.0	48.0	1.10	---	---	0.02	0.010	0.052	0.035	0.017	---	---	---
WQ0666	2000-09-27	16.0	50.0	1.50	---	---	0.02	0.020	0.050	0.031	0.019	---	---	---
WQ0666	2000-10-31	14.0	52.0	1.20	---	---	0.04	0.020	0.070	0.049	0.021	---	---	---
WQ0666	2000-11-28	13.0	53.0	2.30	---	---	0.05	0.020	0.130	0.113	0.017	---	---	---
WQ0666	2000-12-19	18.0	60.0	1.80	---	---	0.19	0.110	0.132	0.120	0.012	---	---	---
WQ0666	2001-01-30	15.0	65.0	1.70	---	---	0.10	0.130	0.052	0.032	0.020	---	---	---
WQ0666	2001-02-27	14.0	67.0	1.20	---	---	0.14	0.130	0.031	0.005	0.026	---	---	---
WQ0666	2001-03-26	11.0	78.0	1.10	---	---	0.71	0.120	0.102	0.032	0.070	---	---	---
WQ0666	2001-04-30	12.0	43.0	0.5	---	---	0.52	0.06	0.156	0.025	0.1310	---	---	---
WQ0666	2001-05-30	14.0	48.0	1	---	---	< 0.02	0.04	0.275	0.136	0.1390	---	---	---
WQ0666	2001-06-27	15.0	51.0	< 0.5	---	---	< 0.02	0.02	0.145	0.134	0.0110	---	---	---
WQ0666	2001-07-30	15.0	49.0	1.1	---	---	0.07	0.06	0.033	0.023	0.0100	---	---	---
WQ0666	2001-08-28	15.0	48.0	1	---	---	0.03	0.09	0.053	0.044	0.0090	---	---	---
WQ0666	2001-09-26	18.0	52.0	1.1	---	---	0.06	0.09	0.048	0.033	0.0150	---	---	---
WQ0666	2001-10-31	14.0	54.0	1.2	---	---	< 0.01	0.06	0.112	0.101	0.0110	---	---	---
WQ0666	2001-11-30	16.0	57.0	< 0.2	---	---	0.08	0.05	0.071	0.012	0.0120	---	---	---
WQ0666	2001-12-18	17.0	58.0	1.2	---	---	0.02	0.11	0.031	0.018	0.0130	---	---	---
WQ1094	1994-08-30	---	---	1.94	---	---	0.07	0.089	0.058	---	0.009	---	6.3	0.003
WQ1436	1998-07-02	10.0	26.0	1.30	---	---	---	0.040	---	---	---	---	---	---
WQ1744	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1745	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1746	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 1. (Continued).

Site	Sample Date	Arsenic Extractable mg/L	Cadmium Extractable or (Total) mg/L	Copper Extractable mg/L	Lead Extractable or (Total) mg/L	Nickel Extractable mg/L	Zinc Extractable mg/L	Chromium Hexavalent mg/L	Aluminum Extractable mg/L	2, 4,5-T ug/L	2,4,5-TP ug/L	2,4-D (Silvex) ug/L	2,4-DB ug/L	Alachlor ug/L	Aldrin ug/L	Atrazine ug/L
WQ0080	1973-06-18	---	---	0.010	0.020	---	0.010	---	---	---	---	---	---	---	---	---
WQ0080	1973-08-08	---	0.0100	< 0.010	0.010	0.020	0.020	---	---	---	---	---	---	---	---	---
WQ0080	1974-02-28	---	---	0.010	0.020	---	0.010	---	---	---	---	---	---	---	---	---
WQ0080	1974-06-20	---	< 0.0100	0.010	0.010	---	0.020	---	---	---	---	---	---	---	---	---
WQ0080	1974-09-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1973-06-18	---	---	< 0.010	0.020	---	0.010	---	---	---	---	---	---	---	---	---
WQ0079	1973-08-08	---	0.0200	< 0.010	0.020	0.020	0.020	---	---	---	---	---	---	---	---	---
WQ0079	1974-02-28	---	---	0.010	0.010	---	0.010	---	---	---	---	---	---	---	---	---
WQ0079	1974-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1974-09-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1994-08-29	---	< 0.0010	< 0.010	< 0.002	< 0.005	< 0.010	---	---	---	---	---	---	---	---	---
WQ0078	1973-06-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1973-08-08	---	---	< 0.010	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1974-02-28	---	---	0.010	0.020	---	0.010	---	---	---	---	---	---	---	---	---
WQ0078	1974-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1974-09-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1977-07-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1978-08-08	---	---	< 0.010	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1994-08-29	---	< 0.0010	< 0.010	< 0.002	< 0.005	< 0.010	---	---	---	---	---	---	---	---	---
WQ0077	1973-06-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1973-08-08	---	---	< 0.010	0.030	---	0.020	---	---	---	---	---	---	---	---	---
WQ0077	1974-02-28	---	---	0.010	0.020	---	0.010	---	---	---	---	---	---	---	---	---
WQ0077	1974-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1974-09-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1977-07-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1994-08-30	---	< 0.0010	< 0.010	< 0.002	< 0.005	0.010	---	---	---	---	---	---	---	---	---
WQ0076	1973-08-08	---	---	< 0.010	0.020	---	0.160	---	---	---	---	---	---	---	---	---
WQ0076	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 1. (Continued).

Site	Sample Date	Arsenic Extractable mg/L	Cadmium Extractable or (Total) mg/L	Copper Extractable mg/L	Lead Extractable or (Total) mg/L	Nickel Extractable mg/L	Zinc Extractable mg/L	Chromium Hexavalent mg/L	Aluminum Extractable mg/L	2, 4,5-T ug/L	2,4,5-TP ug/L	2,4-D (Silvex) ug/L	2,4-DB ug/L	Alachlor ug/L	Aldrin ug/L	Atrazine ug/L
WQ0076	1994-08-30	---	< 0.0010	< 0.010	< 0.002	< 0.005	0.010	---	---	---	---	---	---	---	---	---
WQ0597	1980-1983	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0597	1994-08-29	---	< 0.0010	< 0.010	< 0.002	0.028	< 0.010	---	---	---	---	---	---	---	---	---
WQ0075	1973-08-08	---	0.0200	< 0.010	0.020	0.030	0.070	---	---	---	---	---	---	---	---	---
WQ0075	1974-02-28	---	---	0.010	0.020	---	0.010	---	---	---	---	---	---	---	---	---
WQ0075	1974-06-20	---	< 0.0100	0.010	0.020	---	0.020	---	---	---	---	---	---	---	---	---
WQ0075	1975-03-12	---	< 0.0050	< 0.005	< 0.010	---	< 0.005	---	---	---	---	---	---	---	---	---
WQ0075	1975-06-03	< 0.0400	< 0.0050	0.005	< 0.010	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1975-09-25	< 0.0400	< 0.0050	< 0.005	< 0.010	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1976-01-28	< 0.0400	< 0.0050	< 0.005	< 0.010	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1976-06-28	< 0.0400	< 0.0050	0.009	< 0.010	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1976-08-16	< 0.0400	< 0.0050	< 0.005	< 0.010	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1976-10-12	---	< 0.0050	< 0.005	0.010	---	< 0.025	---	---	---	---	---	---	---	---	---
WQ0075	1977-02-28	< 0.0400	< 0.0050	< 0.005	< 0.010	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1977-05-30	< 0.0050	< 0.0050	< 0.010	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1991-08-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1991-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1991-10-23	---	< 0.0010	< 0.010	< 0.002	< 0.005	< 0.010	< 0.020	0.783	---	---	< 0.05	---	---	---	< 0.5
WQ0666	1991-11-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1991-12-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-01-21	---	< 0.0010	< 0.010	< 0.002	< 0.005	< 0.010	< 0.020	0.049	< 0.01	< 0.01	< 0.05	< 0.2	< 2.0	< 0.01	< 0.5
WQ0666	1992-02-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-03-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-04-08	---	< 0.0010	< 0.010	< 0.002	< 0.005	< 0.010	< 0.020	0.603	< 0.01	< 0.01	< 0.05	< 0.2	< 2.0	< 0.01	< 0.5
WQ0666	1992-05-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-06-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-07-13	---	< 0.0010	< 0.010	< 0.002	< 0.005	< 0.010	---	0.070	< 0.01	< 0.01	< 0.05	< 0.2	< 2.0	< 0.01	< 0.5
WQ0666	1992-08-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-09-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-10-07	---	< 0.0010	< 0.010	< 0.002	0.007	< 0.010	< 0.020	0.512	< 0.01	< 0.01	0.19	< 0.2	< 2.0	< 0.01	< 0.5
WQ0666	1992-11-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-12-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-01-12	---	< 0.0010	< 0.010	< 0.002	< 0.005	0.010	< 0.020	0.280	< 0.01	< 0.01	0.06	< 0.2	< 2.0	< 0.01	< 0.5
WQ0666	1993-02-09	---	< 0.0010	---	< 0.002	0.006	---	---	0.260	---	---	---	---	---	---	---
WQ0666	1993-03-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-04-14	---	< 0.0010	0.040	< 0.002	< 0.005	< 0.010	< 0.020	0.024	< 0.01	< 0.01	< 0.05	< 0.2	< 2.0	< 0.01	< 0.5
WQ0666	1993-05-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-06-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-07-13	---	< 0.0010	< 0.010	< 0.002	< 0.005	< 0.010	< 0.020	0.022	< 0.01	< 0.01	< 0.05	< 0.2	< 2.0	< 0.01	< 0.5
WQ0666	1993-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-09-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-10-12	---	< 0.0010	< 0.010	< 0.002	< 0.005	0.010	< 0.020	0.592	< 0.01	< 0.01	< 0.05	< 0.2	< 2.0	< 0.01	< 0.5
WQ0666	1993-11-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-12-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-01-25	---	0.0030	< 0.010	< 0.002	< 0.005	< 0.010	< 0.020	0.301	< 0.01	< 0.01	0.06	< 0.2	< 2.0	< 0.01	< 0.5
WQ0666	1994-02-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-03-15	---	< 0.0010	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-04-12	---	< 0.0010	< 0.010	< 0.002	< 0.005	< 0.010	< 0.020	0.146	---	---	< 0.05	< 0.2	< 2.0	< 0.01	< 0.5
WQ0666	1994-05-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-06-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-07-12	---	< 0.0010	< 0.010	< 0.002	< 0.005	< 0.010	< 0.020	0.020	---	---	< 0.05	< 0.2	< 2.0	---	< 0.5
WQ0666	1994-08-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-09-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-10-25	---	< 0.0010	< 0.010	< 0.002	0.009	< 0.010	< 0.020	0.232	---	---	0.06	< 0.2	< 2.0	---	< 0.5
WQ0666	1994-11-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-12-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-01-24	---	< 0.0010	< 0.010	< 0.002	< 0.005	0.010	< 0.020	0.147	---	---	< 0.05	< 0.2	< 2.0	---	< 0.5
WQ0666	1995-02-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-03-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-04-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-04-20	---	< 0.0010	< 0.010	0.002	< 0.005	0.020	< 0.020	0.477	---	---	< 0.05	< 0.2	< 2.0	---	< 0.5
WQ0666	1995-05-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-06-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-07-11	---	< 0.0010	< 0.010	< 0.002	< 0.005	0.010	< 0.020	0.196	---	---	0.08	< 0.2	< 2.0	---	< 0.5
WQ0666	1995-08-15	---	---	---	---	---	---	< 0.020	---	---	---	---	---	---	---	---
WQ0666	1995-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-10-23	---	< 0.0010	< 0.010	< 0.002	< 0.005	0.010	< 0.020	0.464	---	---	< 0.05	< 0.2	< 2.0	---	< 0.5
WQ0666	1995-11-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-12-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-01-30	---	< 0.0010	< 0.010	< 0.002	< 0.005	< 0.01	< 0.02	0.444	---	---	< 0.05	< 0.2	< 2.0	---	< 0.5
WQ0666	1996-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-03-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-04-16	---	< 0.0010	< 0.010	< 0.002	< 0.005	< 0.01	< 0.02	0.126	---	---	< 0.05	< 0.2	< 2.0	---	< 0.5
WQ0666	1996-05-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-06-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-07-15	---	< 0.0010	< 0.010	< 0.002	< 0.005	< 0.010	< 0.020	0.095	---	---	---	---	---	---	---
WQ0666	1996-08-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 1. (Continued).

Site	Sample Date	Arsenic Extractable mg/L	Cadmium Extractable or (Total) mg/L	Copper Extractable mg/L	Lead Extractable or (Total) mg/L	Nickel Extractable mg/L	Zinc Extractable mg/L	Chromium Hexavalent mg/L	Aluminum Extractable mg/L	2, 4,5-T ug/L	2,4,5-TP ug/L	2,4-D (Silvex) ug/L	2,4-DB ug/L	Alachlor ug/L	Aldrin ug/L	Atrazine ug/L
WQ0666	1996-09-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-10-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-11-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-12-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-02-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-03-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-05-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-06-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-07-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-08-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-09-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-10-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-11-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-12-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-01-27	---	< 0.0005	---	< 0.001	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-02-24	---	(Total	---	(Total	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-03-30	---	Cadmium)	---	Lead)	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-04-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-05-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-06-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-07-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-08-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-09-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-10-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-11-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-12-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-01-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-02-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-03-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-05-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-07-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-08-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-09-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-11-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-11-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-12-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-01-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-02-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-03-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-04-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-05-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-06-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-07-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-09-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-10-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-11-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-12-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-01-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-02-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-03-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-04-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-06-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-07-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-08-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-10-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-11-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-12-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1094	1994-08-30	---	< 0.0010	< 0.010	< 0.002	< 0.005	0.010	---	---	---	---	---	---	---	---	---
WQ1436	1998-07-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1744	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1745	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1746	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 1. (Continued).

Site	Sample Date	Azinphos Methyl	Bromacil	Bromoxynil	Carbofuran	Chlordane (Cis)	Chlordane (Trans)	Chlorothalonil	DDD	DDE	DDT	Deltamethrin	Diazinon	Dicamba	Diclofop-methyl	Dichloroprop (2,4-DP)	Dieldrin
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
WQ0080	1973-06-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1973-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1974-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1974-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1974-09-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1973-06-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1973-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1974-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1974-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1974-09-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1994-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1973-06-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1973-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1974-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1974-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1974-09-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1977-07-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1978-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1994-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1973-06-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1973-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1974-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1974-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1974-09-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1977-07-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1994-08-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1973-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 1. (Continued).

Site	Sample Date	Azinphos Methyl	Bromacil	Bromoxynil	Carbofuran	Chlordane (Cis)	Chlordane (Trans)	Chlorothalonil	DDD	DDE	DDT	Deltamethrin	Diazinon	Dicamba	Diclofop-methyl	Dichloroprop (2,4-DP)	Dieldrin
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
WQ0076	1994-08-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0597	1980-1983	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0597	1994-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1973-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1974-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1974-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1991-08-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1991-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1991-10-23	---	< 1.0	< 0.01	---	---	---	---	---	---	---	---	---	< 0.02	< 0.09	< 0.1	---
WQ0666	1991-11-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1991-12-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-01-21	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	---	< 0.02	< 0.09	< 0.1	< 0.02
WQ0666	1992-02-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-03-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-04-08	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	---	< 0.02	< 0.09	< 0.1	< 0.02
WQ0666	1992-05-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-06-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-07-13	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	---	< 0.02	< 0.09	< 0.1	< 0.02
WQ0666	1992-08-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-09-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-10-07	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	< 0.5	< 0.02	< 0.09	< 0.1	< 0.02
WQ0666	1992-11-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-12-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-01-12	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	< 0.5	< 0.02	< 0.09	< 0.1	< 0.02
WQ0666	1993-02-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-03-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-04-14	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	< 0.5	0.02	< 0.09	< 0.1	< 0.02
WQ0666	1993-05-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-06-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-07-13	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	< 0.5	< 0.02	< 0.09	< 0.1	< 0.02
WQ0666	1993-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-09-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-10-12	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	< 0.5	< 0.02	< 0.09	< 0.1	< 0.02
WQ0666	1993-11-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-12-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-01-25	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	< 0.5	< 0.02	< 0.09	< 0.1	< 0.02
WQ0666	1994-02-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-03-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-04-12	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	< 0.5	< 0.02	< 0.09	< 0.1	< 0.02
WQ0666	1994-05-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-06-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-07-12	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	---	---	---	---	---	< 0.02	< 0.09	< 0.1	---
WQ0666	1994-08-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-09-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-10-25	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	---	---	---	---	---	< 0.02	< 0.09	< 0.1	---
WQ0666	1994-11-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-12-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-01-24	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	---	---	---	---	---	< 0.02	< 0.09	< 0.1	---
WQ0666	1995-02-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-03-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-04-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-04-20	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	---	---	---	---	---	< 0.02	< 0.09	< 0.1	---
WQ0666	1995-05-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-06-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-07-11	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	---	---	---	---	---	< 0.02	< 0.09	< 0.1	---
WQ0666	1995-08-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-10-23	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	---	---	---	< 0.04	---	< 0.02	< 0.09	< 0.1	---
WQ0666	1995-11-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-12-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-01-30	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	---	---	---	< 0.04	---	< 0.02	< 0.09	< 0.10	---
WQ0666	1996-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-03-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-04-16	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	< 5.0	---	---	---	< 0.04	---	< 0.02	< 0.09	< 0.10	---
WQ0666	1996-05-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-06-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-07-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-08-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 1. (Continued).

Site	Sample Date	Azinphos Methyl ug/L	Bromacil ug/L	Bromoxynil ug/L	Carbofuran ug/L	Chlordane (Cis) ug/L	Chlordane (Trans) ug/L	Chlorothalonil ug/L	DDD ug/L	DDE ug/L	DDT ug/L	Deltamethrin ug/L	Diazinon ug/L	Dicamba ug/L	Diclofop-methyl ug/L	Dichloroprop (2,4-DP) ug/L	Dieldrin ug/L
WQ0666	1996-09-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-10-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-11-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-12-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-02-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-03-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-05-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-06-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-07-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-08-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-09-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-10-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-11-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-12-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-01-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-02-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-03-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-04-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-05-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-06-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-07-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-08-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-09-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-10-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-11-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-12-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-01-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-02-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-03-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-05-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-07-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-08-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-09-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-11-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-11-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-12-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-01-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-02-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-03-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-04-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-05-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-06-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-07-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-09-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-10-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-11-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-12-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-01-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-02-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-03-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-04-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-06-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-07-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-08-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-10-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-11-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-12-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1094	1994-08-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1436	1998-07-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1744	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1745	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1746	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 1. (Continued).

Site	Sample Date	Dimethoate	Dinoseb	Dursban (Chlorpyrophos-ethyl)	Endosulfan I	Endrin	Epta	Ethifluralin	HCH (Alpha)	HCH (Beta)	HCH (Delta)	HCH (Gamma) (Lindane)	Heptachlor	Heptachlor Epoxide	Malathion	MCPA	Methoxychlor
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
WQ0080	1973-06-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1973-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1974-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1974-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1974-09-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1973-06-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1973-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1974-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1974-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1974-09-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1994-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1973-06-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1973-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1974-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1974-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1974-09-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1977-07-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1978-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1994-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1973-06-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1973-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1974-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1974-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1974-09-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1977-07-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1994-08-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1973-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 1. (Continued).

Site	Sample Date	Dimethoate ug/L	Dinoseb ug/L	Dursban (Chlorpyrophos-ethyl) ug/L	Endosulfan I ug/L	Endrin ug/L	Epta ug/L	Ethifluralin ug/L	HCH (Alpha) ug/L	HCH (Beta) ug/L	HCH (Delta) ug/L	HCH (Gamma) (Lindane) ug/L	Heptachlor ug/L	Heptachlor Epoxide ug/L	Malathion ug/L	MCPA ug/L	Methxychlor ug/L
WQ0076	1994-08-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0597	1980-1983	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0597	1994-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1973-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1974-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1974-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1991-08-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1991-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1991-10-23	---	< 0.05	---	---	---	---	---	---	---	---	< 0.02	---	---	---	< 10.	---
WQ0666	1991-11-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1991-12-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-01-21	---	< 0.05	---	< 0.01	< 0.02	---	---	< 0.02	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	---	< 20.	< 0.04
WQ0666	1992-02-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-03-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-04-08	---	< 0.05	---	< 0.01	< 0.02	---	---	< 0.02	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	---	< 20.	< 0.04
WQ0666	1992-05-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-06-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-07-13	---	< 0.05	---	< 0.01	< 0.02	---	---	< 0.02	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	---	< 10.	< 0.04
WQ0666	1992-08-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-09-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-10-07	< 1.0	< 0.05	< 0.8	< 0.01	< 0.02	---	---	< 0.02	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	< 0.9	< 10.	< 0.04
WQ0666	1992-11-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-12-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-01-12	< 1.0	< 0.05	< 0.8	< 0.01	< 0.02	---	---	< 0.02	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	< 0.9	< 10.	< 0.04
WQ0666	1993-02-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-03-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-04-14	< 1.0	< 0.05	< 0.8	< 0.01	< 0.02	---	---	< 0.02	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	< 0.9	< 10.	< 0.04
WQ0666	1993-05-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-06-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-07-13	< 1.0	< 0.05	< 0.8	< 0.01	< 0.02	---	---	< 0.02	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	< 0.9	< 10.	< 0.04
WQ0666	1993-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-09-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-10-12	< 1.0	< 0.05	< 0.8	< 0.01	< 0.02	---	---	< 0.02	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	< 0.9	12	< 0.04
WQ0666	1993-11-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-12-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-01-25	< 1.0	< 0.05	< 0.8	< 0.01	< 0.02	---	---	< 0.02	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	< 0.9	< 10.	< 0.04
WQ0666	1994-02-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-03-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-04-12	< 1.0	---	< 0.8	< 0.01	< 0.02	---	---	< 0.02	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	< 0.9	< 10.	< 0.04
WQ0666	1994-05-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-06-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-07-12	< 1.0	---	< 0.8	---	---	---	---	---	---	---	< 0.02	---	---	< 0.9	< 10.	< 0.04
WQ0666	1994-08-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-09-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-10-25	< 1.0	---	< 0.8	---	---	---	---	---	---	---	< 0.02	---	---	< 0.9	< 10.	< 0.04
WQ0666	1994-11-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-12-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-01-24	< 1.0	---	< 0.8	---	---	---	---	---	---	---	< 0.02	---	---	< 0.9	< 10.	< 0.04
WQ0666	1995-02-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-03-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-04-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-04-20	< 1.0	---	< 0.8	---	---	---	---	---	---	---	< 0.02	---	---	< 0.9	< 10.	< 0.04
WQ0666	1995-05-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-06-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-07-11	< 1.0	---	< 0.8	---	---	---	---	---	---	---	< 0.02	---	---	< 0.9	13	< 0.04
WQ0666	1995-08-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-10-23	< 1.0	---	< 0.8	---	---	---	< 0.02	---	---	---	< 0.02	---	---	< 0.9	< 10.	< 0.04
WQ0666	1995-11-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-12-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-01-30	< 1.0	---	< 0.8	---	---	---	< 0.02	---	---	---	< 0.02	---	---	< 0.9	< 10	< 0.04
WQ0666	1996-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-03-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-04-16	< 1.0	---	< 0.8	---	---	< 5.0	< 0.02	---	---	---	< 0.02	---	---	< 0.9	< 10	< 0.04
WQ0666	1996-05-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-06-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-07-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-08-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 1. (Continued).

Site	Sample Date	Dimethoate	Dinoseb	Dursban (Chlorpyrophos-ethyl)	Endosulfan I	Endrin	Epta	Ethifluralin	HCH (Alpha)	HCH (Beta)	HCH (Delta)	HCH (Gamma) (Lindane)	Heptachlor	Heptachlor Epoxide	Malathion	MCPA	Methxychlor
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
WQ0666	1996-09-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-10-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-11-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-12-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-02-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-03-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-05-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-06-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-07-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-08-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-09-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-10-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-11-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-12-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-01-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-02-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-03-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-04-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-05-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-06-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-07-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-08-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-09-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-10-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-11-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-12-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-01-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-02-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-03-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-05-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-07-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-08-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-09-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-11-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-11-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-12-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-01-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-02-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-03-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-04-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-05-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-06-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-07-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-09-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-10-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-11-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-12-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-01-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-02-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-03-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-04-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-06-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-07-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-08-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-10-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-11-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-12-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1094	1994-08-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1436	1998-07-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1744	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1745	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1746	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 1. (Continued).

Site	Sample Date	Metribuzin ug/L	Mirex ug/L	Parathion Ethyl ug/L	Parathion Methyl ug/L	Picloram ug/L	Propanil ug/L	Propachlor ug/L	Propoxur ug/L	Simazine ug/L	Terbufos ug/L	Triallate ug/L	Triclopyr ug/L	Trifluralin ug/L
WQ0080	1973-06-18	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1973-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1974-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1974-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1974-09-18	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0080	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1973-06-18	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1973-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1974-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1974-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1974-09-18	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0079	1994-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1973-06-18	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1973-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1974-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1974-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1974-09-18	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1977-07-11	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1978-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0078	1994-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1973-06-18	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1973-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1974-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1974-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1974-09-18	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1977-07-11	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0077	1994-08-30	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1973-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0076	1977-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 1. (Continued).

Site	Sample Date	Metribuzin ug/L	Mirex ug/L	Parathion Ethyl ug/L	Parathion Methyl ug/L	Picloram ug/L	Propanil ug/L	Propachlor ug/L	Propoxur ug/L	Simazine ug/L	Terbufos ug/L	Triallate ug/L	Triclopyr ug/L	Trifluralin ug/L
WQ0076	1994-08-30	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0597	1980-1983	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0597	1994-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1973-08-08	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1974-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1974-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1975-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1975-09-25	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1976-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1976-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1976-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1976-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1977-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0075	1977-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1991-08-20	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1991-09-19	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1991-10-23	< 1.0	---	---	---	< 0.2	< 2.0	< 2.0	---	< 0.5	---	< 1.0	---	< 0.03
WQ0666	1991-11-20	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1991-12-11	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-01-21	< 1.0	< 0.02	---	---	< 0.2	< 2.0	< 2.0	< 2.0	< 0.5	---	< 1.0	< 0.02	< 0.03
WQ0666	1992-02-18	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-03-10	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-04-08	< 1.0	< 0.02	---	---	< 0.2	< 2.0	< 2.0	< 2.0	< 0.5	---	< 1.0	< 0.02	< 0.03
WQ0666	1992-05-25	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-06-15	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-07-13	< 1.0	< 0.02	---	---	< 0.2	< 2.0	< 2.0	< 2.0	< 0.5	---	< 1.0	< 0.02	< 0.03
WQ0666	1992-08-18	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-09-15	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-10-07	< 1.0	< 0.02	< 0.9	< 0.6	< 0.2	< 2.0	< 2.0	< 2.0	< 0.5	< 0.7	< 1.0	< 0.02	< 0.03
WQ0666	1992-11-17	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1992-12-08	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-01-12	< 1.0	< 0.02	< 0.9	< 0.6	< 0.2	< 2.0	< 2.0	< 2.0	< 0.5	< 0.7	< 1.0	< 0.02	< 0.03
WQ0666	1993-02-09	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-03-16	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-04-14	< 1.0	< 0.02	< 0.9	< 0.6	< 0.2	< 2.0	< 2.0	< 2.0	< 0.5	< 0.7	< 1.0	< 0.02	< 0.03
WQ0666	1993-05-18	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-06-15	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-07-13	< 1.0	< 0.02	< 0.9	< 0.6	< 0.2	< 2.0	< 2.0	< 2.0	< 0.5	< 0.7	< 1.0	< 0.02	< 0.03
WQ0666	1993-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-09-14	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-10-12	< 1.0	< 0.02	< 0.9	< 0.6	< 0.2	< 2.0	< 2.0	< 2.0	< 0.5	< 0.7	< 1.0	< 0.02	< 0.03
WQ0666	1993-11-16	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1993-12-07	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-01-25	< 1.0	< 0.02	< 0.9	< 0.6	< 0.2	< 2.0	< 2.0	< 2.0	< 0.5	< 0.7	< 1.0	< 0.02	< 0.03
WQ0666	1994-02-15	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-03-15	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-04-12	< 1.0	< 0.02	< 0.9	< 0.6	< 0.2	< 2.0	< 2.0	< 2.0	< 0.5	< 0.7	< 1.0	< 0.02	< 0.03
WQ0666	1994-05-24	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-06-14	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-07-12	< 1.0	---	---	---	< 0.2	< 2.0	---	< 2.0	< 0.5	< 0.7	< 1.0	< 0.02	< 0.03
WQ0666	1994-08-15	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-09-12	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-10-25	< 1.0	---	---	---	< 0.2	< 2.0	---	< 2.0	< 0.5	< 0.7	< 1.0	< 0.02	< 0.03
WQ0666	1994-11-22	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1994-12-12	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-01-24	< 1.0	---	---	---	< 0.2	< 2.0	---	< 2.0	< 0.5	< 0.7	< 1.0	< 0.02	< 0.03
WQ0666	1995-02-21	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-03-21	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-04-17	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-04-20	< 1.0	---	---	---	< 0.2	< 2.0	---	< 2.0	< 0.5	< 0.7	< 1.0	< 0.02	< 0.03
WQ0666	1995-05-17	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-06-13	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-07-11	< 1.0	---	---	---	< 0.2	< 2.0	---	< 2.0	< 0.5	< 0.7	< 1.0	< 0.02	< 0.03
WQ0666	1995-08-15	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-10-23	< 1.0	---	---	---	< 0.2	< 2.0	---	< 2.0	< 0.5	< 0.7	< 1.0	< 0.02	< 0.03
WQ0666	1995-11-02	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1995-12-18	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-01-30	< 1.0	---	---	---	< 0.20	< 2.0	---	< 2.0	< 0.5	< 0.7	< 1.0	< 0.02	< 0.03
WQ0666	1996-02-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-03-19	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-04-16	< 1.0	---	---	---	< 0.20	< 2.0	---	< 2.0	< 0.5	< 0.7	< 1.0	< 0.02	< 0.03
WQ0666	1996-05-13	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-06-17	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-07-15	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-08-20	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 1. (Continued).

Site	Sample Date	Metribuzin	Mirex	Parathion Ethyl	Parathion Methyl	Picloram	Propanil	Propachlor	Propoxur	Simazine	Terbufos	Triallate	Triclopyr	Trifluralin
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
WQ0666	1996-09-24	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-10-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-11-19	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1996-12-10	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-01-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-02-25	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-03-25	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-05-27	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-06-30	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-07-29	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-08-26	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-09-23	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-10-29	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-11-25	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1997-12-16	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-01-27	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-02-24	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-03-30	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-04-18	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-05-26	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-06-23	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-07-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-08-26	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-09-29	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-10-27	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-11-24	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1998-12-16	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-01-26	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-02-23	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-03-23	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-05-25	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-06-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-07-27	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-08-31	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-09-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-11-02	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-11-30	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	1999-12-21	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-01-25	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-02-29	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-03-21	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-04-25	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-05-29	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-06-27	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-07-26	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-09-27	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-10-31	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-11-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2000-12-19	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-01-30	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-02-27	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-03-26	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-04-30	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-05-30	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-06-27	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-07-30	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-08-28	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-10-31	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-11-30	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0666	2001-12-18	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1094	1994-08-30	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1436	1998-07-02	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1744	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1745	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ1746	1997-2000	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 2. Lake Manitoba bacteria, chlorophyll a and Secchi Disc from June 1973 to December 2001.

Site	Sample Date	Location	Total Coliform Bacteria (MPN) Bacteria/100 mL	Fecal Coliform Bacteria (MPN) Bacteria/100 mL	Total Coliform Bacteria (MF) Bacteria/100 mL	Fecal Coliform Bacteria (MF) Bacteria/100 mL	*Escherichia coli* Bacteria Bacteria/100 mL	Chlorophyll a ug/L	Secchi Disc Depth m
WQ0080	1973-06-18	L. Manitoba E. of Twin Is.	0	---	---	---	---	---	---
WQ0080	1973-08-08	L. Manitoba E. of Twin Is.	0	0	---	---	---	---	---
WQ0080	1974-02-28	L. Manitoba E. of Twin Is.	4	0	---	---	---	---	---
WQ0080	1974-06-20	L. Manitoba E. of Twin Is.	0	0	---	---	---	---	---
WQ0080	1974-09-18	L. Manitoba E. of Twin Is.	0	0	---	---	---	---	---
WQ0080	1975-03-12	L. Manitoba E. of Twin Is.	0	0	---	---	---	---	---
WQ0080	1975-06-03	L. Manitoba E. of Twin Is.	0	0	---	---	---	---	---
WQ0080	1975-09-25	L. Manitoba E. of Twin Is.	0	0	---	---	---	---	---
WQ0080	1976-01-28	L. Manitoba E. of Twin Is.	0	0	---	---	---	---	---
WQ0080	1976-06-28	L. Manitoba E. of Twin Is.	4	4	---	---	---	---	---
WQ0080	1976-08-16	L. Manitoba E. of Twin Is.	0	0	---	---	---	---	---
WQ0080	1976-10-12	L. Manitoba E. of Twin Is.	0	0	---	---	---	---	---
WQ0080	1977-02-28	L. Manitoba E. of Twin Is.	0	0	---	---	---	---	---
WQ0080	1977-05-30	L. Manitoba E. of Twin Is.	4	0	---	---	---	---	---
WQ0080	1977-09-19	L. Manitoba E. of Twin Is.	23	0	---	---	---	---	---
WQ0079	1973-06-18	L. Manitoba N. of Pt. Asham	0	---	---	---	---	---	---
WQ0079	1973-08-08	L. Manitoba N. of Pt. Asham	0	0	---	---	---	---	---
WQ0079	1974-02-28	L. Manitoba N. of Pt. Asham	0	0	---	---	---	---	---
WQ0079	1974-06-20	L. Manitoba N. of Pt. Asham	0	0	---	---	---	---	---
WQ0079	1974-09-18	L. Manitoba N. of Pt. Asham	0	0	---	---	---	---	---
WQ0079	1975-03-12	L. Manitoba N. of Pt. Asham	0	0	---	---	---	---	---
WQ0079	1975-06-03	L. Manitoba N. of Pt. Asham	0	0	---	---	---	---	---
WQ0079	1975-09-25	L. Manitoba N. of Pt. Asham	0	0	---	---	---	---	---
WQ0079	1976-01-28	L. Manitoba N. of Pt. Asham	0	0	---	---	---	---	---
WQ0079	1976-06-28	L. Manitoba N. of Pt. Asham	0	0	---	---	---	---	---
WQ0079	1976-08-16	L. Manitoba N. of Pt. Asham	0	0	---	---	---	---	---
WQ0079	1976-10-12	L. Manitoba N. of Pt. Asham	4	0	---	---	---	---	---
WQ0079	1977-02-28	L. Manitoba N. of Pt. Asham	0	0	---	---	---	---	---
WQ0079	1977-05-30	L. Manitoba N. of Pt. Asham	43	0	---	---	---	---	---
WQ0079	1977-09-19	L. Manitoba N. of Pt. Asham	23	0	---	---	---	---	---
WQ0079	1994-08-29	L. Manitoba N. of Pt. Asham	---	---	---	< 10	---	7.5	---
WQ0078	1973-06-18	L. Manitoba near Reed Is.	0	---	---	---	---	---	---
WQ0078	1973-08-08	L. Manitoba near Reed Is.	0	0	---	---	---	---	---
WQ0078	1974-02-28	L. Manitoba near Reed Is.	0	0	---	---	---	---	---
WQ0078	1974-06-20	L. Manitoba near Reed Is.	0	0	---	---	---	---	---
WQ0078	1974-09-18	L. Manitoba near Reed Is.	0	0	---	---	---	---	---
WQ0078	1975-03-12	L. Manitoba near Reed Is.	0	0	---	---	---	---	---
WQ0078	1975-06-03	L. Manitoba near Reed Is.	0	0	---	---	---	---	---
WQ0078	1975-09-25	L. Manitoba near Reed Is.	0	0	---	---	---	---	---
WQ0078	1976-01-28	L. Manitoba near Reed Is.	0	0	---	---	---	---	---
WQ0078	1976-06-28	L. Manitoba near Reed Is.	0	0	---	---	---	---	---
WQ0078	1976-08-16	L. Manitoba near Reed Is.	0	0	---	---	---	---	---
WQ0078	1976-10-12	L. Manitoba near Reed Is.	0	0	---	---	---	---	---
WQ0078	1977-02-28	L. Manitoba near Reed Is.	0	0	---	---	---	---	---
WQ0078	1977-05-30	L. Manitoba near Reed Is.	4	0	---	---	---	---	---
WQ0078	1977-07-11	L. Manitoba near Reed Is.	9	4	---	---	---	---	---
WQ0078	1977-09-19	L. Manitoba near Reed Is.	4	0	---	---	---	---	---
WQ0078	1978-08-08	L. Manitoba near Reed Is.	0	0	---	---	---	---	---
WQ0078	1994-08-29	L. Manitoba near Reed Is.	---	---	---	< 10	---	6.0	---
WQ0077	1973-06-18	L. Manitoba E. of Duscharme Is.	0	---	---	---	---	---	---
WQ0077	1973-08-08	L. Manitoba E. of Duscharme Is.	3	0	---	---	---	---	---
WQ0077	1974-02-28	L. Manitoba E. of Duscharme Is.	0	0	---	---	---	---	---
WQ0077	1974-06-20	L. Manitoba E. of Duscharme Is.	0	0	---	---	---	---	---
WQ0077	1974-09-18	L. Manitoba E. of Duscharme Is.	0	0	---	---	---	---	---
WQ0077	1975-03-12	L. Manitoba E. of Duscharme Is.	0	0	---	---	---	---	---
WQ0077	1975-06-03	L. Manitoba E. of Duscharme Is.	7	0	---	---	---	---	---
WQ0077	1975-09-25	L. Manitoba E. of Duscharme Is.	0	0	---	---	---	---	---
WQ0077	1976-01-28	L. Manitoba E. of Duscharme Is.	0	0	---	---	---	---	---
WQ0077	1976-06-28	L. Manitoba E. of Duscharme Is.	0	0	---	---	---	---	---
WQ0077	1976-08-16	L. Manitoba E. of Duscharme Is.	0	0	---	---	---	---	---
WQ0077	1976-10-12	L. Manitoba E. of Duscharme Is.	0	0	---	---	---	---	---
WQ0077	1977-02-28	L. Manitoba E. of Duscharme Is.	0	0	---	---	---	---	---
WQ0077	1977-05-30	L. Manitoba E. of Duscharme Is.	0	0	---	---	---	---	---
WQ0077	1977-07-11	L. Manitoba E. of Duscharme Is.	23	23	---	---	---	---	---
WQ0077	1977-09-19	L. Manitoba E. of Duscharme Is.	9	4	---	---	---	---	---
WQ0077	1994-08-30	L. Manitoba E. of Duscharme Is.	---	---	---	---	---	4.5	---
WQ0076	1973-08-08	L. Manitoba near Sandy Bay	4	0	---	---	---	---	---
WQ0076	1975-03-12	L. Manitoba near Sandy Bay	0	0	---	---	---	---	---
WQ0076	1975-06-03	L. Manitoba near Sandy Bay	0	0	---	---	---	---	---
WQ0076	1975-09-25	L. Manitoba near Sandy Bay	0	0	---	---	---	---	---
WQ0076	1976-01-28	L. Manitoba near Sandy Bay	0	0	---	---	---	---	---
WQ0076	1976-06-28	L. Manitoba near Sandy Bay	0	0	---	---	---	---	---

Appendix 2. (Continued).

Site	Sample Date	Location	Total Coliform Bacteria (MPN) Bacteria/100 mL	Fecal Coliform Bacteria (MPN) Bacteria/100 mL	Total Coliform Bacteria (MF) Bacteria/100 mL	Fecal Coliform Bacteria (MF) Bacteria/100 mL	*Escherichia coli* Bacteria Bacteria/100 mL	Chlorophyll a ug/L	Secchi Disc Depth m
WQ0076	1976-08-16	L. Manitoba near Sandy Bay	23	23	---	---	---	---	---
WQ0076	1976-10-12	L. Manitoba near Sandy Bay	0	0	---	---	---	---	---
WQ0076	1977-02-28	L. Manitoba near Sandy Bay	0	0	---	---	---	---	---
WQ0076	1977-05-30	L. Manitoba near Sandy Bay	3	0	---	---	---	---	---
WQ0076	1977-09-19	L. Manitoba near Sandy Bay	23	4	---	---	---	18.0	---
WQ0076	1994-08-30	L. Manitoba near Sandy Bay	---	---	---	---	---	3.2	0.6
WQ0597	1980-06-08	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	3.1	0.85
WQ0597	1980-06-15	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	3.2	0.9
WQ0597	1980-06-21	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	14.9	0.6
WQ0597	1980-06-29	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	6.0	0.65
WQ0597	1980-07-06	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	8.7	0.6
WQ0597	1980-07-20	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	6.5	0.6
WQ0597	1980-08-04	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	4.7	0.7
WQ0597	1980-08-10	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	5.6	0.65
WQ0597	1980-09-01	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	20.2	0.7
WQ0597	1980-09-07	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	4.7	0.6
WQ0597	1981-06-21	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	4.0	0.9
WQ0597	1981-07-19	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	9.6	0.7
WQ0597	1981-07-26	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	5.9	0.65
WQ0597	1981-08-09	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	6.7	0.8
WQ0597	1981-08-16	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	6.2	0.7
WQ0597	1981-08-23	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	5.6	0.75
WQ0597	1982-05-30	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	4.7	0.6
WQ0597	1982-06-13	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	7.5	0.8
WQ0597	1982-07-01	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	6.3	1
WQ0597	1982-07-04	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	4.2	0.7
WQ0597	1982-08-21	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	2.5	0.6
WQ0597	1982-08-23	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	11.0	0.5
WQ0597	1982-09-05	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	6.3	0.75
WQ0597	1983-07-03	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	7.4	0.7
WQ0597	1983-07-09	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	---	0.8
WQ0597	1983-08-02	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	5.5	0.7
WQ0597	1983-08-09	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	11.0	0.7
WQ0597	1983-08-14	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	16.0	0.6
WQ0597	1983-09-06	Lake Manitoba near Twin Lakes Beach	---	---	---	< 10	---	10.0	---
WQ0597	1994-08-29	Lake Manitoba near Twin Lakes Beach	---	---	---	---	---	---	---
WQ0075	1973-08-08	L. Manitoba near Delta	0	0	---	---	---	---	---
WQ0075	1974-02-28	L. Manitoba near Delta	0	0	---	---	---	---	---
WQ0075	1974-06-20	L. Manitoba near Delta	0	0	---	---	---	---	---
WQ0075	1975-03-12	L. Manitoba near Delta	0	0	---	---	---	---	---
WQ0075	1975-06-03	L. Manitoba near Delta	9	0	---	---	---	---	---
WQ0075	1975-09-25	L. Manitoba near Delta	43	15	---	---	---	---	---
WQ0075	1976-01-28	L. Manitoba near Delta	0	0	---	---	---	---	---
WQ0075	1976-06-28	L. Manitoba near Delta	4	4	---	---	---	---	---
WQ0075	1976-08-16	L. Manitoba near Delta	15	4	---	---	---	---	---
WQ0075	1976-10-12	L. Manitoba near Delta	15	4	---	---	---	---	---
WQ0075	1977-02-28	L. Manitoba near Delta	0	0	---	---	---	---	---
WQ0075	1977-05-30	L. Manitoba near Delta	4	0	---	---	---	13.0	---
WQ0666	1991-08-20	L. Manitoba near Delta Field Station	1	---	---	---	---	28.0	---
WQ0666	1991-09-19	L. Manitoba near Delta Field Station	---	---	---	---	---	10.5	---
WQ0666	1991-10-23	L. Manitoba near Delta Field Station	43	---	---	---	---	4.0	---
WQ0666	1991-11-20	L. Manitoba near Delta Field Station	< 1	---	---	---	---	8.5	---
WQ0666	1991-12-11	L. Manitoba near Delta Field Station	< 1	---	---	---	---	1.0	---
WQ0666	1992-01-21	L. Manitoba near Delta Field Station	---	---	---	---	---	2.0	---
WQ0666	1992-02-18	L. Manitoba near Delta Field Station	---	---	---	---	---	1.0	---
WQ0666	1992-03-10	L. Manitoba near Delta Field Station	---	---	---	---	---	63.0	---
WQ0666	1992-04-08	L. Manitoba near Delta Field Station	---	---	---	---	---	5.0	---
WQ0666	1992-05-25	L. Manitoba near Delta Field Station	1	---	---	---	---	12.0	---
WQ0666	1992-06-15	L. Manitoba near Delta Field Station	1	---	---	---	---	7.0	---
WQ0666	1992-07-13	L. Manitoba near Delta Field Station	1	---	---	---	---	12.0	---
WQ0666	1992-08-18	L. Manitoba near Delta Field Station	---	---	---	---	---	10.0	---
WQ0666	1992-09-15	L. Manitoba near Delta Field Station	---	---	---	---	---	18.0	---
WQ0666	1992-10-07	L. Manitoba near Delta Field Station	---	---	---	---	---	4.0	---
WQ0666	1992-11-17	L. Manitoba near Delta Field Station	---	---	---	---	---	< 1.0	---
WQ0666	1992-12-08	L. Manitoba near Delta Field Station	---	---	---	---	---	2.0	---
WQ0666	1993-01-12	L. Manitoba near Delta Field Station	---	---	---	---	---	1.0	---
WQ0666	1993-02-09	L. Manitoba near Delta Field Station	< 1	---	---	---	---	2.0	---
WQ0666	1993-03-16	L. Manitoba near Delta Field Station	< 1	< 1	---	---	---	7.0	1.25
WQ0666	1993-04-14	L. Manitoba near Delta Field Station	< 1	---	---	---	---	6.5	0.46
WQ0666	1993-05-18	L. Manitoba near Delta Field Station	< 1	---	---	---	---	< 1.0	---
WQ0666	1993-06-15	L. Manitoba near Delta Field Station	---	---	---	---	---	8.5	0.4
WQ0666	1993-07-13	L. Manitoba near Delta Field Station	< 1	---	---	---	---	---	---

Appendix 2. (Continued).

Site	Sample Date	Location	Total Coliform Bacteria (MPN) Bacteria/100 mL	Fecal Coliform Bacteria (MPN) Bacteria/100 mL	Total Coliform Bacteria (MF) Bacteria/100 mL	Fecal Coliform Bacteria (MF) Bacteria/100 mL	*Escherichia coli* Bacteria Bacteria/100 mL	Chlorophyll *a* ug/L	Secchi Disc Depth m
WQ0666	1993-08-16	L. Manitoba near Delta Field Station	---	---	---	---	---	5.0	---
WQ0666	1993-09-14	L. Manitoba near Delta Field Station	8	---	---	---	---	14.0	0.2
WQ0666	1993-10-12	L. Manitoba near Delta Field Station	10	---	---	---	---	14.0	0.3
WQ0666	1993-11-16	L. Manitoba near Delta Field Station	1	---	---	---	---	5.2	0.24
WQ0666	1993-12-07	L. Manitoba near Delta Field Station	< 1	---	---	---	---	3.5	0.6
WQ0666	1994-01-25	L. Manitoba near Delta Field Station	---	---	---	---	---	2.5	---
WQ0666	1994-02-15	L. Manitoba near Delta Field Station	---	---	---	---	---	2.5	0.86
WQ0666	1994-03-15	L. Manitoba near Delta Field Station	---	---	---	---	---	2.5	0.6
WQ0666	1994-04-12	L. Manitoba near Delta Field Station	---	---	---	---	---	5.0	1.8
WQ0666	1994-05-24	L. Manitoba near Delta Field Station	---	---	---	---	---	3.0	0.65
WQ0666	1994-06-14	L. Manitoba near Delta Field Station	---	---	---	---	---	6.0	0.65
WQ0666	1994-07-12	L. Manitoba near Delta Field Station	---	---	---	---	---	8.5	0.34
WQ0666	1994-08-15	L. Manitoba near Delta Field Station	---	---	---	---	---	5.5	0.45
WQ0666	1994-09-12	L. Manitoba near Delta Field Station	---	---	---	---	---	7.0	0.45
WQ0666	1994-10-25	L. Manitoba near Delta Field Station	---	---	---	---	---	32.0	0.2
WQ0666	1994-11-22	L. Manitoba near Delta Field Station	---	---	---	---	---	5.0	0.35
WQ0666	1994-12-12	L. Manitoba near Delta Field Station	---	---	---	---	---	1.5	0.5
WQ0666	1995-01-24	L. Manitoba near Delta Field Station	---	---	---	---	---	4.5	0.82
WQ0666	1995-02-21	L. Manitoba near Delta Field Station	---	---	---	---	---	< 1.0	1.1
WQ0666	1995-03-21	L. Manitoba near Delta Field Station	---	---	---	---	---	8.7	0.3
WQ0666	1995-04-17	L. Manitoba near Delta Field Station	---	---	---	---	---	8.7	0.08
WQ0666	1995-04-20	L. Manitoba near Delta Field Station	---	---	---	---	---	16.0	0.1
WQ0666	1995-05-17	L. Manitoba near Delta Field Station	43	4	---	---	---	7.0	0.1
WQ0666	1995-06-13	L. Manitoba near Delta Field Station	---	---	---	< 10	---	9.0	0.5
WQ0666	1995-07-11	L. Manitoba near Delta Field Station	---	---	---	< 10	---	5.5	0.65
WQ0666	1995-08-15	L. Manitoba near Delta Field Station	---	---	---	< 10	---	13.0	0.55
WQ0666	1995-09-26	L. Manitoba near Delta Field Station	---	---	---	< 10	---	7.0	0.45
WQ0666	1995-10-23	L. Manitoba near Delta Field Station	---	---	---	< 10	---	49.0	0.15
WQ0666	1995-11-02	L. Manitoba near Delta Field Station	---	---	---	< 10	---	2.6	0.35
WQ0666	1995-12-18	L. Manitoba near Delta Field Station	---	---	---	< 10	---	2.5	0.45
WQ0666	1996-01-30	L. Manitoba near Delta Field Station	---	---	---	< 10	---	< 1.0	0.75
WQ0666	1996-02-28	L. Manitoba near Delta Field Station	---	---	---	< 10	---	< 1.0	1
WQ0666	1996-03-19	L. Manitoba near Delta Field Station	---	---	---	< 10	---	< 1.0	1
WQ0666	1996-04-16	L. Manitoba near Delta Field Station	---	---	---	< 10	---	< 1.0	0.45
WQ0666	1996-05-13	L. Manitoba near Delta Field Station	---	---	---	< 10	---	37.0	0.51
WQ0666	1996-06-17	L. Manitoba near Delta Field Station	---	---	---	< 10	---	5.2	0.6
WQ0666	1996-07-15	L. Manitoba near Delta Field Station	---	---	---	< 10	---	6.5	1
WQ0666	1996-08-20	L. Manitoba near Delta Field Station	---	---	---	< 10	---	22.0	0.4
WQ0666	1996-09-24	L. Manitoba near Delta Field Station	---	---	---	< 10	---	10.0	0.45
WQ0666	1996-10-28	L. Manitoba near Delta Field Station	---	---	---	< 10	---	14.0	0.3
WQ0666	1996-11-19	L. Manitoba near Delta Field Station	---	---	---	< 10	---	2.5	0.4
WQ0666	1996-12-10	L. Manitoba near Delta Field Station	---	---	---	< 10	---	7.5	0.6
WQ0666	1997-01-28	L. Manitoba near Delta Field Station	---	---	< 10	< 10	---	< 1	0.5
WQ0666	1997-02-25	L. Manitoba near Delta Field Station	---	---	< 10	< 10	---	< 1	1.1
WQ0666	1997-03-25	L. Manitoba near Delta Field Station	---	---	---	< 10	---	< 1	1.25
WQ0666	1997-04-27	L. Manitoba near Delta Field Station	---	---	---	< 10	---	---	0.75
WQ0666	1997-05-27	L. Manitoba near Delta Field Station	---	---	---	< 10	---	4.5	0.5
WQ0666	1997-06-30	L. Manitoba near Delta Field Station	---	---	---	< 10	---	5.0	0.25
WQ0666	1997-07-29	L. Manitoba near Delta Field Station	---	---	---	10	---	6.0	0.5
WQ0666	1997-08-26	L. Manitoba near Delta Field Station	---	---	---	< 10	---	6.0	0.5
WQ0666	1997-09-23	L. Manitoba near Delta Field Station	---	---	---	< 10	---	6.0	0.4
WQ0666	1997-10-29	L. Manitoba near Delta Field Station	---	---	---	10	---	---	0.15
WQ0666	1997-11-25	L. Manitoba near Delta Field Station	---	---	---	< 10	---	4.0	0.5
WQ0666	1997-12-16	L. Manitoba near Delta Field Station	---	---	---	< 10	---	3.0	1.32
WQ0666	1998-01-27	L. Manitoba near Delta Field Station	---	---	---	< 10	---	2.0	1.75
WQ0666	1998-02-24	L. Manitoba near Delta Field Station	---	---	---	< 10	---	---	2
WQ0666	1998-03-30	L. Manitoba near Delta Field Station	---	---	---	< 10	---	1.0	1.35
WQ0666	1998-04-18	L. Manitoba near Delta Field Station	---	---	---	< 10	---	9.0	0.45
WQ0666	1998-05-26	L. Manitoba near Delta Field Station	---	---	---	< 10	---	2.0	0.8
WQ0666	1998-06-23	L. Manitoba near Delta Field Station	---	---	---	< 10	---	6.0	0.42
WQ0666	1998-07-28	L. Manitoba near Delta Field Station	---	---	---	< 10	---	10.0	0.35
WQ0666	1998-08-26	L. Manitoba near Delta Field Station	---	---	---	< 10	---	6.0	0.4
WQ0666	1998-09-29	L. Manitoba near Delta Field Station	---	---	---	< 10	---	6.0	0.3
WQ0666	1998-10-27	L. Manitoba near Delta Field Station	---	---	---	< 10	---	4.0	0.25
WQ0666	1998-11-24	L. Manitoba near Delta Field Station	---	---	---	< 10	---	< 1	0.8
WQ0666	1998-12-16	L. Manitoba near Delta Field Station	---	---	---	< 10	---	---	---
WQ0666	1999-01-26	L. Manitoba near Delta Field Station	---	---	---	< 10	---	---	1.6
WQ0666	1999-02-23	L. Manitoba near Delta Field Station	---	---	---	< 10	---	---	---
WQ0666	1999-03-23	L. Manitoba near Delta Field Station	---	---	---	< 10	---	---	2.42
WQ0666	1999-04-27	L. Manitoba near Delta Field Station	---	---	---	< 10	---	12.0	0.3
WQ0666	1999-05-25	L. Manitoba near Delta Field Station	---	---	---	< 10	---	2.0	0.25
WQ0666	1999-06-28	L. Manitoba near Delta Field Station	---	---	---	< 10	---	5.0	---

Appendix 2. (Continued).

Site	Sample Date	Location	Total Coliform Bacteria (MPN) Bacteria/100 mL	Fecal Coliform Bacteria (MPN) Bacteria/100 mL	Total Coliform Bacteria (MF) Bacteria/100 mL	Fecal Coliform Bacteria (MF) Bacteria/100 mL	*Escherichia coli* Bacteria Bacteria/100 mL	Chlorophyll a ug/L	Secchi Disc Depth m
WQ0666	1999-07-27	L. Manitoba near Delta Field Station	---	---	---	< 10	---	7.0	---
WQ0666	1999-08-31	L. Manitoba near Delta Field Station	---	---	---	< 10	---	9.0	---
WQ0666	1999-09-28	L. Manitoba near Delta Field Station	---	---	---	10	---	5.0	0.3
WQ0666	1999-11-02	L. Manitoba near Delta Field Station	---	---	---	10	---	24.0	0.1
WQ0666	1999-11-30	L. Manitoba near Delta Field Station	---	---	---	< 10	---	6.0	0.22
WQ0666	1999-12-21	L. Manitoba near Delta Field Station	---	---	---	< 10	---	2.0	---
WQ0666	2000-01-25	L. Manitoba near Delta Field Station	---	---	---	< 10	---	1.0	---
WQ0666	2000-02-29	L. Manitoba near Delta Field Station	---	---	---	< 10	---	2.0	1
WQ0666	2000-03-21	L. Manitoba near Delta Field Station	---	---	---	< 10	---	4.0	---
WQ0666	2000-04-25	L. Manitoba near Delta Field Station	---	---	---	< 10	< 10	< 1	0.8
WQ0666	2000-05-29	L. Manitoba near Delta Field Station	---	---	---	< 10	< 10	5.0	---
WQ0666	2000-06-27	L. Manitoba near Delta Field Station	---	---	---	< 10	< 10	10.0	0.35
WQ0666	2000-07-26	L. Manitoba near Delta Field Station	---	---	---	< 10	< 10	3.0	0.6
WQ0666	2000-08-29	L. Manitoba near Delta Field Station	---	---	---	< 10	< 10	21.0	0.4
WQ0666	2000-09-27	L. Manitoba near Delta Field Station	---	---	---	10	10	6.0	0.35
WQ0666	2000-10-31	L. Manitoba near Delta Field Station	---	---	---	< 10	< 10	3.0	0.2
WQ0666	2000-11-28	L. Manitoba near Delta Field Station	---	---	---	< 10	< 10	7.0	0.13
WQ0666	2000-12-19	L. Manitoba near Delta Field Station	---	---	---	< 10	< 10	16.0	0.3
WQ0666	2001-01-30	L. Manitoba near Delta Field Station	---	---	---	< 10	< 10	8.0	---
WQ0666	2001-02-27	L. Manitoba near Delta Field Station	---	---	---	< 10	< 10	< 1	---
WQ0666	2001-03-26	L. Manitoba near Delta Field Station	---	---	---	10	< 10	< 1	0.4
WQ0666	2001-04-30	L. Manitoba near Delta Field Station	---	---	---	< 10	< 10	---	---
WQ0666	2001-05-30	L. Manitoba near Delta Field Station	---	---	---	---	---	32.7	---
WQ0666	2001-06-27	L. Manitoba near Delta Field Station	---	---	---	30	30	38.8	---
WQ0666	2001-07-30	L. Manitoba near Delta Field Station	---	---	---	< 10	< 10	15.7	---
WQ0666	2001-08-28	L. Manitoba near Delta Field Station	---	---	---	< 10	< 10	17.7	---
WQ0666	2001-09-26	L. Manitoba near Delta Field Station	---	---	---	< 10	< 10	4.9	---
WQ0666	2001-10-31	L. Manitoba near Delta Field Station	---	---	---	< 10	< 10	23.1	---
WQ0666	2001-11-30	L. Manitoba near Delta Field Station	---	---	---	< 10	< 10	15.5	---
WQ0666	2001-12-18	L. Manitoba near Delta Field Station	---	---	---	< 10	< 10	5.6	---
WQ1094	1994-08-30	L. Manitoba north of Whitemud R. mouth	---	---	---	---	---	13.0	---
WQ1436	1998-07-02	L. Manitoba at Laurentia Beach area	---	---	---	---	---	---	---
WQ1744	1997-06-30	L. Manitoba at St. Ambrose Beach	---	---	Geometric Mean	13	---	---	---
WQ1744	1997-07-28	L. Manitoba at St. Ambrose Beach	---	---	Geometric Mean	< 10	---	---	---
WQ1744	1997-08-26	L. Manitoba at St. Ambrose Beach	---	---	---	10	---	---	---
WQ1744	1997-09-30	L. Manitoba at St. Ambrose Beach	---	---	---	120	---	---	---
WQ1744	1998-05-19	L. Manitoba at St. Ambrose Beach	---	---	Geometric Mean	52	---	---	---
WQ1744	1998-06-16	L. Manitoba at St. Ambrose Beach	---	---	Geometric Mean	< 10	---	---	---
WQ1744	1998-07-14	L. Manitoba at St. Ambrose Beach	---	---	Geometric Mean	< 13	---	---	---
WQ1744	1998-07-17	L. Manitoba at St. Ambrose Beach	---	---	Geometric Mean	< 10	---	---	---
WQ1744	1998-08-12	L. Manitoba at St. Ambrose Beach	---	---	Geometric Mean	60	---	---	---
WQ1744	1998-09-10	L. Manitoba at St. Ambrose Beach	---	---	Geometric Mean	18	---	---	---
WQ1744	1999-05-17	L. Manitoba at St. Ambrose Beach	---	---	Geometric Mean	< 10	---	---	---
WQ1744	1999-06-01	L. Manitoba at St. Ambrose Beach	---	---	Geometric Mean	< 10	---	---	---
WQ1744	1999-06-15	L. Manitoba at St. Ambrose Beach	---	---	Geometric Mean	< 10	---	---	---
WQ1744	1999-07-13	L. Manitoba at St. Ambrose Beach	---	---	Geometric Mean	16	---	---	---
WQ1744	1999-08-10	L. Manitoba at St. Ambrose Beach	---	---	Geometric Mean	46	---	---	---
WQ1744	1999-09-07	L. Manitoba at St. Ambrose Beach	---	---	Geometric Mean	14	---	---	---
WQ1744	2000-05-16	L. Manitoba at St. Ambrose Beach	---	---	Geometric Mean	< 10	< 10	---	---
WQ1744	2000-06-14	L. Manitoba at St. Ambrose Beach	---	---	Geometric Mean	97	27	---	---
WQ1744	2000-07-11	L. Manitoba at St. Ambrose Beach	---	---	Geometric Mean	< 10	< 10	---	---
WQ1744	2000-08-09	L. Manitoba at St. Ambrose Beach	---	---	Geometric Mean	< 10	< 10	---	---
WQ1744	2000-09-07	L. Manitoba at St. Ambrose Beach	---	---	Geometric Mean	54	< 30	---	---
WQ1745	1997-05-28	L. Manitoba at Delta Beach	---	---	Geometric Mean	< 10	---	---	---
WQ1745	1997-06-30	L. Manitoba at Delta Beach	---	---	Geometric Mean	259	---	---	---
WQ1745	1997-07-03	L. Manitoba at Delta Beach	---	---	Geometric Mean	273	---	---	---
WQ1745	1997-07-09	L. Manitoba at Delta Beach	---	---	Geometric Mean	12	---	---	---
WQ1745	1997-07-28	L. Manitoba at Delta Beach	---	---	Geometric Mean	56	---	---	---
WQ1745	1997-08-26	L. Manitoba at Delta Beach	---	---	---	260	---	---	---
WQ1745	1997-08-28	L. Manitoba at Delta Beach	---	---	---	< 10	---	---	---
WQ1745	1997-09-30	L. Manitoba at Delta Beach	---	---	---	250	---	---	---
WQ1745	1997-10-09	L. Manitoba at Delta Beach	---	---	---	790	---	---	---
WQ1745	1997-10-28	L. Manitoba at Delta Beach	---	---	Geometric Mean	< 10	---	---	---
WQ1745	1998-05-19	L. Manitoba at Delta Beach	---	---	Geometric Mean	< 35	---	---	---
WQ1745	1998-06-03	L. Manitoba at Delta Beach	---	---	Geometric Mean	< 27	---	---	---
WQ1745	1998-06-16	L. Manitoba at Delta Beach	---	---	Geometric Mean	52	---	---	---
WQ1745	1998-06-30	L. Manitoba at Delta Beach	---	---	Geometric Mean	189	---	---	---
WQ1745	1998-07-14	L. Manitoba at Delta Beach	---	---	Geometric Mean	91	---	---	---
WQ1745	1998-07-17	L. Manitoba at Delta Beach	---	---	Geometric Mean	21	---	---	---
WQ1745	1998-07-28	L. Manitoba at Delta Beach	---	---	Geometric Mean	160	---	---	---
WQ1745	1998-08-12	L. Manitoba at Delta Beach	---	---	Geometric Mean	< 15	---	---	---
WQ1745	1998-09-10	L. Manitoba at Delta Beach	---	---	Geometric Mean	44	---	---	---

Appendix 2. (Continued).

Site	Sample Date	Location	Total Coliform Bacteria (MPN) Bacteria/100 mL	Fecal Coliform Bacteria (MPN) Bacteria/100 mL	Total Coliform Bacteria (MF) Bacteria/100 mL	Fecal Coliform Bacteria (MF) Bacteria/100 mL	*Escherichia coli* Bacteria Bacteria/100 mL	Chlorophyll a ug/L	Secchi Disc Depth m
WQ1745	1999-06-01	L. Manitoba at Delta Beach	---	---	Geometric Mean	< 20	---	---	---
WQ1745	1999-06-14	L. Manitoba at Delta Beach	---	---	Geometric Mean	27	---	---	---
WQ1745	1999-06-29	L. Manitoba at Delta Beach	---	---	Geometric Mean	< 10	---	---	---
WQ1745	1999-07-13	L. Manitoba at Delta Beach	---	---	Geometric Mean	< 36	---	---	---
WQ1745	1999-07-27	L. Manitoba at Delta Beach	---	---	Geometric Mean	< 30	---	---	---
WQ1745	1999-08-10	L. Manitoba at Delta Beach	---	---	Geometric Mean	117	---	---	---
WQ1745	1999-09-07	L. Manitoba at Delta Beach	---	---	Geometric Mean	120	---	---	---
WQ1745	2000-05-16	L. Manitoba at Delta Beach	---	---	Geometric Mean	< 10	< 10	---	---
WQ1745	2000-05-30	L. Manitoba at Delta Beach	---	---	Geometric Mean	< 20	< 12	---	---
WQ1745	2000-06-14	L. Manitoba at Delta Beach	---	---	Geometric Mean	334	150	---	---
WQ1745	2000-06-19	L. Manitoba at Delta Beach	---	---	Geometric Mean	< 11	< 10	---	---
WQ1745	2000-06-27	L. Manitoba at Delta Beach	---	---	Geometric Mean	50	35	---	---
WQ1745	2000-07-11	L. Manitoba at Delta Beach	---	---	Geometric Mean	< 10	< 10	---	---
WQ1745	2000-07-26	L. Manitoba at Delta Beach	---	---	Geometric Mean	44	23	---	---
WQ1745	2000-08-09	L. Manitoba at Delta Beach	---	---	Geometric Mean	123	44	---	---
WQ1745	2000-08-23	L. Manitoba at Delta Beach	---	---	Geometric Mean	< 13	< 13	---	---
WQ1745	2000-09-07	L. Manitoba at Delta Beach	---	---	Geometric Mean	131	87	---	---
WQ1746	1997-05-29	L. Manitoba at Lynch's Pt. Beach	---	---	Geometric Mean	< 10	---	---	---
WQ1746	1997-06-25	L. Manitoba at Lynch's Pt. Beach	---	---	Geometric Mean	< 57	---	---	---
WQ1746	1997-07-30	L. Manitoba at Lynch's Pt. Beach	---	---	Geometric Mean	< 14	---	---	---
WQ1746	1998-05-19	L. Manitoba at Lynch's Pt. Beach	---	---	Geometric Mean	108	---	---	---
WQ1746	1998-06-18	L. Manitoba at Lynch's Pt. Beach	---	---	Geometric Mean	48	---	---	---
WQ1746	1998-07-14	L. Manitoba at Lynch's Pt. Beach	---	---	Geometric Mean	355	---	---	---
WQ1746	1998-07-17	L. Manitoba at Lynch's Pt. Beach	---	---	Geometric Mean	33	---	---	---
WQ1746	1998-08-12	L. Manitoba at Lynch's Pt. Beach	---	---	Geometric Mean	< 14	---	---	---
WQ1746	1998-09-10	L. Manitoba at Lynch's Pt. Beach	---	---	Geometric Mean	36	---	---	---
WQ1746	1999-05-18	L. Manitoba at Lynch's Pt. Beach	---	---	Geometric Mean	42	---	---	---
WQ1746	1999-06-01	L. Manitoba at Lynch's Pt. Beach	---	---	Geometric Mean	29	---	---	---
WQ1746	1999-06-15	L. Manitoba at Lynch's Pt. Beach	---	---	Geometric Mean	50	---	---	---
WQ1746	1999-07-13	L. Manitoba at Lynch's Pt. Beach	---	---	Geometric Mean	40	---	---	---
WQ1746	1999-08-12	L. Manitoba at Lynch's Pt. Beach	---	---	Geometric Mean	62	---	---	---
WQ1746	1999-09-08	L. Manitoba at Lynch's Pt. Beach	---	---	Geometric Mean	21	---	---	---
WQ1746	2000-05-18	L. Manitoba at Lynch's Pt. Beach	---	---	Geometric Mean	< 10	< 10	---	---
WQ1746	2000-06-19	L. Manitoba at Lynch's Pt. Beach	---	---	Geometric Mean	< 10	< 10	---	---
WQ1746	2000-07-10	L. Manitoba at Lynch's Pt. Beach	---	---	---	68	47	---	---
WQ1746	2000-08-03	L. Manitoba at Lynch's Pt. Beach	---	---	Geometric Mean	148	52	---	---
WQ1746	2000-09-07	L. Manitoba at Lynch's Pt. Beach	---	---	Geometric Mean	668	431	---	---

Appendix 3. Lake Manitoba water quality data from 1966 through 1969 (Cober 1968 and Crowe 1972).

Site	Date mg/L	Specific Conductivity uS/cm	Total Dissolved Solids mg/L	pH pH Units	Total Alkalinity mg/L	Bicarbonate Alkalinity mg/L	Carbonate Alkalinity mg/L	Calcium mg/L	Magnesium mg/L	Hardness ($CaCO_3$) mg/L	Iron mg/L	Sodium mg/L	Chloride mg/L	Sulphate mg/L	Boron mg/L	Total Phosphate mg/L	Total Phosphorus Estimate mg/L
C1	Oct-66	2000	1380	---	240	254	28.8	48.0	80.9	452	---	308	510	200	---	---	---
C1	Dec-66	2500	1580	---	264	288	28.0	52.8	95.2	524	---	296	560	216	---	---	---
C1	Jan-67	3000	1560	8.50	272	332	28.8	51.2	97.3	528	---	415	540	234	---	---	---
C1	Feb-67	2500	1690	8.15	284	308	19.2	59.2	105.0	580	---	378	580	191	---	---	---
C1	Mar-67	3000	1980	8.20	336	361	24.0	68.8	127.0	696	---	453	710	277	---	---	---
C1	Oct-67	2500	1400	8.15	240	373	9.6	48.0	83.1	462	---	335	460	201	---	---	---
C1	Dec-67	2700	1580	8.07	286	349	0.0	48.0	88.5	484	---	375	510	227	---	0.080	0.0314
C1	Jan-68	3100	1580	8.07	284	346	0.0	59.2	102.0	570	---	392	648	257	---	0.020	0.0078
C1	Feb-68	2950	1740	8.07	288	351	0.0	54.4	102.0	557	---	390	626	244	---	---	---
C1	Mar-68	2200	1200	8.12	176	215	0.0	51.2	50.0	334	---	295	446	147	---	0.010	0.0039
C1	Apr-68	480	370	7.98	156	190	0.0	49.6	28.6	242	---	353	69	49	---	0.360	0.1413
C1	May-68	2400	1300	8.60	208	224	14.4	36.8	69.2	376	---	297	105	179	---	---	---
C1	Jul-68	2250	1360	7.98	232	283	0.0	40.0	76.5	428	---	350	468	193	0.22	---	---
C1	Nov-68	2500	1570	8.41	262	293	9.6	56.0	88.2	503	---	382	470	212	0.55	---	---
C1	Jan-69	2700	1736	8.37	292	298	28.8	52.0	97.7	532	0.08	433	603	235	0.02	---	---
C1	Feb-69	2900	1820	8.12	280	342	0.0	59.2	104.0	576	---	400	750	240	0.05	---	---
C1	Mar-69	3000	1830	8.25	304	366	2.4	55.2	104.0	564	---	413	620	258	0.25	0.080	0.0314
C1	Apr-69	3000	1800	8.10	292	356	0.0	52.0	101.0	548	---	430	640	253	0.30	0.040	0.0157
C1	May-69	2000	1260	8.10	208	254	0.0	40.0	68.5	382	---	330	447	175	0.25	0.020	0.0078
C1	Jun-69	2400	1420	8.30	236	268	9.6	47.2	75.8	430	---	346	514	204	0.32	0.080	0.0314
C1	Jul-69	2200	1280	8.35	224	215	28.8	44.0	70.5	400	---	306	475	127	< 0.02	0.060	0.0235
C2	Oct-66	2000	1380	---	238	246	21.6	43.2	80.9	440	---	321	480	198	---	---	---
C2	Dec-66	2500	1540	---	262	299	10.1	56.0	68.1	520	---	305	560	221	---	---	---
C2	Jan-67	2500	1500	8.50	264	264	28.8	54.4	96.5	532	---	400	570	234	---	---	---
C2	Feb-67	2500	1680	8.12	286	315	16.8	56.0	102.0	560	---	376	590	209	---	---	---
C3	Oct-66	2000	1370	---	238	246	22.0	56.0	77.9	460	---	311	510	194	---	---	---
C3	Dec-66	2600	1640	---	282	312	15.6	60.8	96.4	548	---	315	590	231	---	---	---
C3	Jan-67	2940	1490	8.55	256	244	33.6	52.8	95.5	524	---	398	560	231	---	---	---
C3	Feb-67	2550	1650	8.10	288	312	19.2	57.6	102.0	564	---	379	610	165	---	---	---
C3	Mar-67	3300	2340	8.34	388	405	33.6	76.8	151.0	812	---	537	830	332	---	---	---
C3	Oct-67	2750	1500	8.08	264	293	14.4	49.6	89.9	494	---	345	510	194	---	---	---
C3	Dec-67	2850	1580	8.02	296	361	0.0	48.0	94.5	509	---	376	510	243	---	0.040	0.0157
C3	Jan-68	2600	1540	7.95	231	282	0.0	57.6	75.9	456	---	346	550	197	---	0.020	0.0078
C3	Feb-68	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
C3	Mar-68	2800	1560	8.15	268	327	0.0	62.4	81.5	492	---	385	566	230	---	0.060	0.0235
C3	Apr-68	3100	1701	9.21	228	151	62.4	27.2	102.0	490	---	456	651	280	---	0.020	0.0078
C3	May-68	780	530	7.96	228	278	0.0	75.2	35.0	332	---	527	131	99	---	0.310	0.1216
C3	Jul-68	2250	1350	8.12	232	283	0.0	48.0	75.0	428	---	358	476	193	---	---	---
C3	Nov-68	2500	1580	8.39	272	273	28.8	60.0	83.1	492	---	377	570	225	0.12	---	---
C3	Jan-69	2700	1736	8.28	292	298	28.8	53.0	103.0	532	0.08	406	603	235	0.02	---	---
C3	Feb-69	2800	1740	8.40	288	303	2.4	51.2	102.0	550	---	382	685	242	0.42	0.040	0.0157
C3	Mar-69	3000	1840	7.85	304	371	0.0	56.0	104.0	365	---	455	634	262	0.25	0.040	0.0157
C3	Apr-69	2400	1600	7.80	260	317	0.0	50.0	88.0	487	---	333	557	219	0.22	0.080	0.0314
C3	May-69	2000	1300	8.00	200	244	0.0	39.6	70.7	390	---	320	447	177	0.20	0.040	0.0157
C3	Jun-69	2400	1420	8.29	236	259	14.4	44.0	79.5	437	---	345	530	200	0.30	0.080	0.0314
C3	Jul-69	2400	1390	8.35	236	229	28.8	42.0	79.5	432	---	328	510	170	0.80	0.015	0.0059
C4	Oct-66	1950	1330	---	234	252	16.8	56.0	58.4	380	---	268	450	187	---	---	---
C4	Dec-66	2400	1460	---	246	278	10.8	51.2	86.6	484	---	284	520	209	---	---	---
C4	Jan-67	2480	1470	8.45	256	264	43.2	57.6	92.5	524	---	395	450	212	---	---	---
C4	Feb-67	2500	1600	8.25	276	293	21.6	52.8	103.0	556	---	371	570	214	---	---	---
C5	Oct-66	1950	1340	---	236	244	21.6	49.6	63.3	384	---	306	590	186	---	---	---
C5	Dec-66	2400	1430	---	214	242	9.6	62.4	70.0	444	---	301	550	188	---	---	---
C5	Jan-67	2750	1500	8.38	264	264	28.8	57.6	95.5	536	---	405	590	221	---	---	---
C5	Feb-67	2450	1610	8.25	276	298	19.6	54.4	101.0	552	---	364	580	190	---	---	---
C5	Mar-67	3300	2360	8.33	386	408	31.2	84.8	143.0	800	---	540	820	318	---	---	---
C5	Oct-67	2600	1400	8.19	236	264	12.0	48.8	80.2	452	---	335	500	202	---	---	---
C5	Dec-67	2700	1510	7.88	254	310	0.0	56.0	75.0	448	---	367	550	203	---	0.020	0.0078
C5	Jan-68	3000	1750	8.03	288	351	0.0	52.8	102.0	550	---	403	635	255	---	0.030	0.0118
C5	Feb-68	3000	1720	7.73	270	329	0.0	54.4	103.0	560	---	375	618	252	---	---	---
C5	Mar-68	2800	1870	7.75	268	327	0.0	51.2	89.5	496	---	387	576	228	---	0.060	0.0235
C5	Apr-68	375	244	7.61	50	61	0.0	27.2	78.0	100	---	503	71	412	---	0.020	0.0078
C5	May-68	2200	1180	8.03	168	205	0.0	44.8	47.7	308	---	280	455	143	---	0.003	0.0012
C5	Jul-68	2100	1310	7.80	220	268	0.0	49.6	68.5	405	---	362	462	176	---	---	---
C5	Nov-68	2200	1380	7.93	232	283	0.0	56.0	66.0	412	---	341	510	185	---	---	---
C5	Jan-69	2500	1662	8.41	268	268	28.8	128.0	91.9	506	0.08	372	605	224	0.02	---	---
C5	Feb-69	2600	1630	8.35	268	283	21.6	49.6	95.3	516	---	358	620	227	0.30	0.090	0.0353
C5	Mar-69	3000	1830	8.00	348	424	0.0	56.0	104.0	570	---	450	634	258	0.25	0.150	0.0589
C5	Apr-69	2600	1670	8.05	260	317	0.0	49.6	92.8	506	---	376	597	234	0.34	0.020	0.0078
C5	May-69	2000	1270	8.20	196	234	2.4	40.8	67.5	380	---	334	447	180	0.25	0.040	0.0157
C5	Jun-69	2400	1420	8.35	220	239	14.4	46.0	76.1	428	---	327	506	198	0.45	0.140	0.0549
C5	Jul-69	2400	1380	8.10	228	278	0.0	44.0	71.5	404	---	313	515	159	0.60	0.090	0.0353
C6	Oct-66	1900	1260	---	184	205	9.6	54.4	59.4	380	---	310	490	157	---	---	---
C6	Dec-66	2200	1370	---	194	230	3.6	52.8	72.9	432	---	288	520	174	---	---	---

Appendix 3. (Continued).

Site	Date mg/L	Specific Conductivity uS/cm	Total Dissolved Solids mg/L	pH pH Units	Total Alkalinity mg/L	Bicarbonate Alkalinity mg/L	Carbonate Alkalinity mg/L	Calcium mg/L	Magnesium mg/L	Hardness ($CaCO_3$) mg/L	Iron mg/L	Sodium mg/L	Chloride mg/L	Sulphate mg/L	Boron mg/L	Total Phosphate mg/L	Total Phosphorus Estimate mg/L
C6	Jan-67	2690	1640	8.45	280	283	33.6	62.4	96.5	552	---	424	580	334	---	---	---
C6	Feb-67	2480	1630	8.25	276	293	21.6	52.8	104.0	560	---	362	590	226	---	---	---
C6	Mar-67	2800	1830	8.24	246	259	20.2	64.0	100.0	572	---	460	720	224	---	---	---
C6	Oct-67	2250	1210	7.82	184	224	0.0	20.4	59.3	370	---	305	470	156	---	---	---
C6	Dec-67	2200	1180	8.05	200	244	0.0	53.6	53.5	354	---	297	470	147	---	0.020	0.0078
C6	Jan-68	2250	1160	7.91	196	239	0.0	59.2	58.0	386	---	297	512	159	---	---	---
C6	Feb-68	2950	1720	7.93	264	322	0.0	56.0	105.0	572	---	349	643	265	---	---	---
C6	Mar-68	2000	1140	7.78	178	217	0.0	51.2	47.8	324	---	262	414	141	---	0.020	0.0078
C6	Apr-68	2950	1670	7.90	268	327	0.0	73.6	74.8	492	---	409	596	217	---	0.030	0.0118
C6	May-68	2200	1150	8.08	164	200	0.0	46.4	46.7	308	---	283	390	134	---	0.110	0.0432
C6	Jul-68	1900	1090	7.63	184	224	0.0	51.2	50.5	337	---	282	408	138	0.28	---	---
C6	Nov-68	1450	1210	8.19	188	229	0.0	52.0	69.9	418	---	286	448	160	0.25	---	---
C6	Jan-69	2500	1592	8.31	268	327*	28.8	50.1	92.8	507	0.06	390	536	217	0.30	---	---
C6	Apr-69	2600	1740	7.75	260	371	0.0	64.0	84.5	508	---	385	686	215	0.16	0.020	0.0078
C6	May-69	1800	1170	7.90	176	215	0.0	40.0	59.6	354	---	306	395	156	0.30	0.160	0.0628
C6	Jun-69	2000	1180	7.95	176	215	0.0	48.0	58.3	360	---	283	445	153	0.20	0.085	0.0334
C6	Jul-69	2000	1170	8.20	176	195	9.6	44.8	52.0	326	---	273	440	114	< 0.02	0.010	0.0039
C7	Oct-66	1800	1250	---	181	195	12.7	68.8	42.9	348	---	288	510	149	---	---	---
C7	Dec-66	2500	1370	---	199	208	16.8	59.2	61.5	400	---	360	540	145	---	---	---
C7	Jan-67	2480	1490	8.05	224	254	9.6	65.6	78.8	488	---	402	570	198	---	---	---
C7	Feb-67	2250	1460	8.10	206	227	12.0	53.4	75.0	444	---	340	550	170	---	---	---
C7	Mar-67	2000	1470	8.13	206	232	9.6	64.0	69.0	444	---	333	550	178	---	---	---
C7	Apr-67	---	880	8.02	126	139	7.2	40.0	41.8	272	---	219	380	109	---	---	---
C7	Jun-67	1600	1110	8.52	166	154	24.0	46.4	35.5	262	---	248	380	132	---	---	---
C7	Aug-67	1600	1090	7.90	164	200	0.0	47.2	56.0	348	---	265	420	127	---	---	---
C7	Sep-67	1600	1110	8.15	156	161	14.4	45.6	54.40	338	---	262	480	153	---	---	---
C7	Nov-67	2100	1160	8.10	174	193	9.6	48.0	53.9	342	---	280	440	144	---	---	---
C7	Dec-67	2200	1190	7.80	200	244	0.0	52.8	54.0	354	---	307	470	112	---	0.010	0.0039
C7	Jan-68	2250	1250	8.24	192	205	14.4	62.4	52.9	374	---	298	482	162	---	0.060	0.0235
C7	Feb-68	2450	1300	7.75	200	244	0.0	59.2	61.0	398	---	321	510	---	---	---	---
C7	Mar-68	2600	1310	8.38	214	222	19.2	62.4	70.0	404	---	357	523	169	---	0.020	0.0078
C7	Apr-68	1900	1050	7.72	128	156	0.0	33.6	40.4	260	---	255	365	118	---	0.010	0.0039
C7	May-68	2000	1130	8.17	164	200	0.0	44.8	47.7	308	---	283	396	140	---	< 0.010	< 0.0039
C7	Jun-68	1900	1100	8.07	180	220	0.0	48.0	52.0	334	---	271	420	147	< 0.02	---	---
C7	Aug-68	1750	1220	8.48	172	180	14.4	56.0	43.7	320	---	283	420	129	< 0.02	---	---
C7	Sep-68	1660	1070	8.53	172	171	19.2	64.0	41.5	331	---	270	406	136	< 0.02	---	---
C7	Jan-69	2100	1620	8.37	200	214	14.4	56.0	62.0	395	---	325	510	144	0.20	0.040	0.0157
C7	Feb-69	2200	1360	8.30	208	224	14.4	61.7	61.7	402	---	306	540	161	0.18	0.020	0.0078
C7	Mar-69	2400	1420	8.10	216	264	0.0	59.3	59.3	390	---	354	500	173	0.35	0.040	0.0157
C7	Apr-69	2200	1390	8.85	212	259	0.0	60.2	60.2	394	---	318	534	225	0.18	0.010	0.0039
C7	Jul-69	1750	1060	7.95	164	200	0.0	44.0	66.8	385	---	255	400	126	---	0.030	0.0118
C8	Oct-66	2000	1330	---	239	255	18.0	46.5	75.0	424	---	315	470	211	---	---	---
C8	Dec-66	2500	1440	---	261	295	11.4	49.6	84.7	472	---	353	530	205	---	---	---
C8	Jan-67	2620	1460	8.50	248	225	38.4	52.8	96.5	528	---	386	530	208	---	---	---
C8	Feb-67	2400	1560	8.41	266	276	24.0	51.2	95.4	520	---	345	560	187	---	---	---
C8	Mar-67	2300	1670	8.20	278	305	16.8	59.2	100.0	560	---	321	630	220	---	---	---
C9	Oct-66	2000	1360	---	238	246	21.6	43.2	79.9	436	---	336	480	202	---	---	---
C9	Dec-66	2700	1550	---	276	295	20.6	54.4	87.5	496	---	360	570	217	---	---	---
C9	Jan-67	2550	1500	8.55	256	254	28.8	56.0	96.5	536	---	390	560	220	---	---	---
C9	Feb-67	2450	1610	8.31	270	290	19.2	52.8	104.0	560	---	362	560	166	---	---	---
C9	Mar-67	2200	1670	8.32	276	293	21.6	54.4	100.0	548	---	362	560	236	---	---	---
C10	Oct-66	2000	1380	---	239	246	22.0	57.6	72.1	440	---	324	530	204	---	---	---
C10	Dec-66	2650	1530	---	267	289	18.2	62.4	80.7	488	---	369	540	206	---	---	---
C10	Jan-67	2480	1460	8.45	248	254	24.0	54.4	98.2	540	---	393	550	223	---	---	---
C10	Feb-67	2450	1590	8.20	267	288	19.2	51.2	105.0	558	---	353	560	197	---	---	---
C10	Mar-67	2250	1720	8.35	284	308	19.2	57.6	104.0	572	---	372	600	208	---	---	---
C10	Apr-67	---	1390	8.17	240	259	16.8	44.0	95.3	502	---	331	500	202	---	---	---
C10	Jun-67	2000	1400	8.64	240	237	27.8	44.0	61.9	364	---	300	460	198	---	---	---
C10	Aug-67	2000	1350	8.68	236	205	40.8	43.2	80.0	436	---	310	480	190	---	---	---
C10	Sep-67	2150	1380	8.45	240	239	26.4	42.4	86.0	460	---	316	500	212	---	---	---
C10	Nov-67	2600	1430	8.43	242	256	19.2	41.6	85.6	456	---	321	510	205	---	---	---
C10	Dec-67	2700	1530	7.91	278	339	0.0	44.0	89.0	476	---	342	530	215	---	0.050	0.0196
C10	Jan-68	2780	1740	8.23	248	273	14.4	48.0	91.9	498	---	352	562	227	---	0.020	0.0078
C10	Feb-68	2800	2020	8.25	208	254	0.0	54.4	92.0	514	---	353	574	---	---	---	---
C10	Mar-68	2950	1640	8.13	274	334	0.0	57.6	99.0	554	---	400	618	245	---	0.030	0.0118
C10	Apr-68	3000	1610	7.79	284	346	0.0	48.0	101.0	535	---	417	600	234	---	0.010	0.0039
C10	May-68	2500	1430	7.94	220	268	0.0	70.4	64.0	440	---	307	455	184	---	0.620	0.2433
C10	Jun-68	2400	1300	8.58	224	254	9.6	37.6	78.7	418	---	301	469	196	0.15	---	---
C10	Jul-68	2400	1330	8.53	216	234	14.4	40.0	72.4	400	---	327	458	203	0.48	---	---
C10	Aug-68	2250	1540	8.75	236	180	28.8	42.4	79.2	432	---	353	500	113	< 0.02	---	---
C10	Sep-68	2300	1620	8.62	236	220	33.6	44.8	72.9	412	---	361	508	193	0.45	---	---
C10	Jan-69	2500	1590	8.51	276	278	28.8	46.0	98.4	520	---	395	516	206	0.35	0.030	0.0118
C10	Mar-69	2800	1780	8.35	280	312	14.4	52.8	99.2	540	---	413	585	243	0.35	0.030	0.0118

Appendix 3. (Continued).

Site	Date mg/L	Specific Conductivity uS/cm	Total Dissolved Solids mg/L	pH pH Units	Total Alkalinity mg/L	Bicarbonate Alkalinity mg/L	Carbonate Alkalinity mg/L	Calcium mg/L	Magnesium mg/L	Hardness ($CaCO_3$) mg/L	Iron mg/L	Sodium mg/L	Chloride mg/L	Sulphate mg/L	Boron mg/L	Total Phosphate mg/L	Total Phosphorus Estimate mg/L
C10	Apr-69	2700	1730	8.20	276	317	9.6	43.6	94.4	522	---	419	577	234	0.30	0.030	0.0118
C11	Oct-66	2000	1360	---	234	242	21.6	51.2	75.0	436	---	320	480	188	---	---	---
C11	Dec-66	2650	1530	---	267	286	19.2	49.6	85.7	476	---	367	540	201	---	---	---
C11	Jan-67	2500	1520	8.40	256	235	38.4	54.4	98.8	524	---	394	540	228	---	---	---
C11	Feb-67	2600	1730	8.30	288	300	25.4	52.0	113.0	594	---	389	610	191	---	---	---
C11	Mar-67	2400	1750	8.13	290	325	14.4	57.6	107.0	584	---	380	570	244	---	---	---
C12	Oct-66	2000	1370	---	238	242	24.0	48.0	81.7	456	---	323	490	199	---	---	---
C12	Dec-66	2650	1520	---	272	293	19.2	49.6	94.5	512	---	380	550	217	---	---	---
C12	Jan-67	2480	1480	8.50	256	215	48	54.0	96.5	532	---	390	550	223	---	---	---
C12	Feb-67	2500	1610	8.33	266	286	19.2	49.6	107.0	564	---	357	570	203	---	---	---
C12	Mar-67	2400	1740	8.18	286	320	14.4	54.4	108.0	580	---	373	590	214	---	---	---
C13	Oct-66	1950	1330	---	238	252	19.2	44.8	78.9	436	---	311	460	201	---	---	---
C13	Dec-66	2600	1470	---	259	260	27.8	54.4	88.5	500	---	357	530	165	---	---	---
C13	Jan-67	2750	1460	8.55	248	215	43.2	51.2	92.5	508	---	384	540	212	---	---	---
C13	Feb-67	2300	1560	8.27	262	281	19.2	48.8	102.0	539	---	348	540	147	---	---	---
C13	Mar-67	2220	1620	8.39	268	278	24.0	54.4	102.0	556	---	347	550	229	---	---	---
C13	Apr-67	---	870	8.07	152	171	7.2	30.4	54.4	300	---	215	310	122	---	---	---
C13	Jun-67	2000	1360	8.65	238	227	31.2	49.6	54.9	350	---	305	480	165	---	---	---
C13	Aug-67	2000	1380	8.58	240	224	33.6	57.6	70.2	432	---	325	490	189	---	---	---
C13	Nov-67	2550	1460	8.50	240	264	14.4	44.0	86.0	464	---	323	510	200	---	---	---
C13	Dec-67	2700	1470	8.45	272	293	19.3	46.4	87.5	476	---	358	500	215	---	0.030	0.0118
C13	Jan-68	2700	1540	8.23	252	284	12.0	54.4	90.5	508	---	360	568	227	---	0.020	0.0078
C13	Feb-68	2800	1640	8.15	264	322	0.0	49.6	94.0	510	---	354	566	---	---	---	---
C13	Mar-68	2900	1640	7.98	266	323	0.0	54.4	97.5	536	---	382	580	237	---	0.060	0.0235
C13	Apr-68	3000	1750	8.01	284	346	0.0	52.0	98.5	535	---	420	609	242	---	0.020	0.0078
C13	May-68	2650	1420	8.35	228	249	14.4	40.0	78.5	424	---	328	475	197	---	0.120	0.0471
C13	Jun-68	2400	1450	8.09	232	283	0.0	40.8	78.7	426	---	331	472	189	< 0.02	---	---
C13	Jul-68	2200	1320	8.62	224	224	24.0	40.0	70.3	392	---	326	463	197	0.48	---	---
C13	Aug-68	---	1730	8.72	236	239	24.0	75.2	61.4	441	---	362	520	115	0.45	---	---
C13	Sep-68	2300	1430	8.48	236	220	33.6	48.0	70.9	412	---	352	505	189	< 0.02	---	---
C13	Jan-69	2500	1570	8.52	276	288	24.0	48.0	93.6	505	---	410	568	213	0.35	0.080	0.0314
C13	Mar-69	2700	1650	8.10	268	327	0.0	48.3	94.0	508	---	386	574	231	0.45	0.070	0.0275
C13	Apr-69	2700	1740	8.20	280	332	4.8	49.2	96.8	521	---	408	577	240	0.33	0.030	0.0118

a. Value corrected

Appendix 4. Lake Manitoba water quality data from 1953 and 1954 (Thomas 1959).

Date/ Location on Lake Manitoba	Specific Conductivity uS/cm	Total Dissolved Solids mg/L	Total Suspended Solids mg/L	Turbidity NTU or Equivalent	Colour Colour Units	pH pH units	Bicarbonate Alkalinity mg/L	Carbonate Alkalinity mg/L	Calcium mg/L	Magnesium mg/L	Hardness ($CaCO_3$) mg/L	Iron Dissolved mg/L	Potassium mg/L	Sodium mg/L	Chloride mg/L	Sulphate mg/L	Boron mg/L	Nitrate mg/L
Delta																		
1953-02-15	2720	1645	---	1	10	8.5	368	9.6	44.4	97.6	513	0.04	11.2	381	600	238	0.28	0.3
1953-03-15	---	---	---	1	100	8.3	381	0.0	44.8	93.9	498	---	24.7	430	582	239	---	3.5
1953-04-16	2124	---	---	3	5	8.4	300	1.2	34.8	73.7	390	---	11.2	326	453	181	0.2	1.0
1953-05-17	1947	1198	61	80	20	8.4	269	2.6	24.6	67.3	338	0.06	26.2	275	415	169	---	1.0
1953-06-17	2152	---	---	25	10	8.4	279	6.0	35.3	72.4	386	---	15.0	300	438	179	0.17	1.6
1953-06-26	1781	1098	62	40	10	8.4	288	3.6	42.4	62.5	363	0.10	18.0	238	354	158	---	2.0
1953-07-23	1949	---	---	15	20	8.8	250	18.5	42.5	62.9	365	---	20.0	294	424	169	---	0.0
1953-08-17	2032	1232	17	15	10	8.6	249	12.7	35.5	66.9	364	0.03	24.0	285	424	178	0.22	0.0
1953-09-17	1975	---	---	35	10	8.3	267	0.0	30.8	68.5	359	---	19.3	273	421	168	---	3.0
1953-10-28	1979	---	---	45	10	8.5	259	9.6	34.7	69.2	372	---	22.0	270	425	173	---	1.6
1954-02-20	2400	1470	5.8	25	5	8.3	336	0.0	42.3	84.4	453	0.03	24.0	332	501	205	---	0.0
1954-07-14	1870	1155	15.9	10	0	8.3	266	0.0	31.2	64.7	344	0.01	17.7	270	389	159	---	1.0
Oak Point																		
1953-06-16	2082	1257	17.2	15	10	8.5	277	11.0	38.5	65.6	366	0.05	26.0	303	435	178	---	0.5

Appendix 5. Lake Manitoba, other water quality data from 1928 to 1975.

Data Source	Location on Lake Manitoba	Date	Specific Conductivity uS/cm	Total Dissolved Solids mg/L	Total Suspended Solids mg/L	pH pH units	Total Alkalinity $CaCO_3$ mg/L	Bicarbonate Alkalinity HCO_3 mg/L	Calcium mg/L	Magnesium mg/L	Hardness ($CaCO_3$) mg/L	Iron Diss. mg/L	Potassium mg/L	Sodium mg/L	Chloride mg/L	Sulphate mg/L	Boron mg/L	Nitrate mg/L
Bajkov 1930[a]	North Basin																	
Bajkov 1930[a]	The Narrows	1928-08	---	628	---	---	90.5[b]	---	11.1	37.4	---	0.2	---	---	204	90.5	---	---
Bajkov 1930[a]	Watchorn Bay	1928-08	---	628	---	---	136.7[b]	---	45.0	48.7	---	0.2	---	---	154	72.9	---	---
Bajkov 1930[a]	Elm Bay	1928-08-25	---	614	---	---	84.8[b]	---	37.2	39.2	---	0.3	---	---	201.5	87.8	---	---
Bajkov 1930[a]	Steeprock Bay	1928-08-10	---	614	---	---	87.9[b]	---	38.2	35.1	---	0.1	---	---	196	87.9	---	---
Bajkov 1930[a]	North Basin	1928 Average		621			86.4[b]		32.9	40.1		0.2			188.9	84.8		
Bajkov 1930[a]	North Basin	Std. Dev.		8			2.2[b]		14.9	6.0		0.1			23.5	8.0		
Bajkov 1930[a]	South Basin																	
Bajkov 1930[a]	Oak Point	1928-09-04	---	758	---	---	113.3[b]	---	32.6	51.9	---	---	---	---	113.3[c]	110.4	---	---
Bajkov 1930[a]	Elm P./Long Pt.	1928-08-15	---	752	---	---	115.8[b]	---	33.6	50.8	---	---	---	---	214.5	115.6	---	---
Bajkov 1930[a]	South Basin	1928 Average		755			114.6[b]		33.1	51.4					214.5	113.0		
Bajkov 1930[a]	South Basin	Std. Dev.		4			1.6[b]		0.7	0.8						3.7		
Gilliland 1965	South Basin	1963-08-11	---	1325	39	8.1	260	293	24	91	433	0.2		339	510	184	---	0.025
van Everdinegen 1971	South Basin	1969	---	---	---	---	---	331	68	65	437		20	342	533	110	---	---
1971 Janusz 1972	South Basin	1971	2166	---	---	8.59	230	---	---	---	435	---	---	---	---	---	---	---
Tudorancea and Green 1975	South Basin	1973	---	1550	---	8.6	273	---	---	---	400	---	---	330	520	---	---	---

a. The average dissolved oxygen concentration in Lake Manitoba in August and September of 1928 was 10.2 + or - 0.8 mg/L.

b. Bajkov (1930) lists CO_3 which appears to be $CaCO_3$ (Total Alkalinity) although Last (1980) assumed it might be bicarbonate (HCO_3) alkalinity.

c. A chloride concentration of 113.3 mg/L was not used for the south average since it appears to have been a transferred number for CO_3 (Bajkov 1930) shown in this table as $CaCO_3$ (Total Alkalinity).

Appendix 6. Water quality in major streams flowing into and out of Lake Manitoba from 1971 through 2001.

Site	Sample Date	Location	Temperature Degrees C	Total Coliform Bacteria (MPN) Bacteria/100 mL	Fecal Coliform Bacteria (MPN) Bacteria/100 mL	Total Coliform Bacteria (MF) Bacteria/100 mL	Fecal Coliform Bacteria (MF) Bacteria/100 mL	*Escherichia coli* Bacteria Bacteria/100 mL	Specific Conductivity Laboratory uS/cm
Assiniboine Diversion est									
WQ0014	1971-04-22	Assiniboine R. at Portage la Prairie W.T.P. reservoir	---	4300	---	---	---	---	550
WQ0014	1972-04-27	Assiniboine R. at Portage la Prairie W.T.P. reservoir	---	930	---	---	---	---	---
WQ0014	1972-05-24	Assiniboine R. at Portage la Prairie W.T.P. reservoir	---	430	---	---	---	---	630
WQ0014	1973 No Flow								
WQ0014	1974-04-05	Assiniboine R. at Portage la Prairie W.T.P. reservoir	---	2300	---	---	---	---	1000
WQ0014	1974-05-02	Assiniboine R. at Portage la Prairie W.T.P. reservoir	8.0	240	240	---	---	---	405
WQ0014	1974-06-04	Assiniboine R. at Portage la Prairie W.T.P. reservoir	20.5	460	15	---	---	---	765
WQ0014	1975-05-27	Assiniboine R. at Portage la Prairie W.T.P. reservoir	---	2300	23	---	---	---	645
WQ0014	1976-05-04	Assiniboine R. at Portage la Prairie W.T.P. reservoir	10.0	2300	1500	---	---	---	655
WQ0014	1977 No Flow								
WQ0391	1978-04-18	Assiniboine R. at PR 240, S. of Portage la Prairie	7.5	240	23	---	---	---	637
WQ0391	1979-04-25	Assiniboine R. at PR 240, S. of Portage la Prairie	2.0	11000	1100	---	---	---	437
WQ0391	1979-04-30	Assiniboine R. at PR 240, S. of Portage la Prairie	4.5	1100	93	---	---	---	1290
WQ0391	1979-05-17	Assiniboine R. at PR 240, S. of Portage la Prairie	12.0	150	21	---	---	---	531
WQ0391	1979-06-20	Assiniboine R. at PR 240, S. of Portage la Prairie	17.0	1100	23	---	---	---	735
WQ0391	1980 No Flow								
WQ0391	1981 No Flow								
WQ0391	1982-04-27	Assiniboine R. at PR 240, S. of Portage la Prairie	9.5	460	21	---	---	---	398
WQ0391	1983-04-21	Assiniboine R. at PR 240, S. of Portage la Prairie	11.0	39	7	---	---	---	465
WQ0391	1983-05-19	Assiniboine R. at PR 240, S. of Portage la Prairie	12.0	23	23	---	---	---	760
WQ0391	1984 No Flow								
WQ0014	No Spring Sample in 1985								
WQ0014	1985-11-13	Assiniboine R. at Portage la Prairie W.T.P. reservoir	3.5	9	4	---	---	---	---
WQ0014	1986-04-09	Assiniboine R. at Portage la Prairie W.T.P. reservoir	10.0	---	---	---	50	---	---
WQ0014	May 86 No Flow								
WQ0014	1986-06-02	Assiniboine R. at Portage la Prairie W.T.P. reservoir	21.0	---	---	---	< 10	---	---
WQ0014	1987-04-06	Assiniboine R. at Portage la Prairie W.T.P. reservoir	4.0	---	---	---	20	---	---
WQ0014	1988 No Flow								
WQ0014	1989-04-04	Assiniboine R. at Portage la Prairie W.T.P. reservoir	0.5	---	---	---	---	---	649
WQ0014	1990 No Flow								
WQ0014	1991 No Flow								
WQ0014	1992-04-07	Assiniboine R. at Portage la Prairie W.T.P. reservoir	4.4	---	---	---	< 10	---	550
WQ0014	1992-05-04	Assiniboine R. at Portage la Prairie W.T.P. reservoir	12.5	---	---	---	< 10	---	693
WQ0014	1993 Aug. Flow								
WQ0014	1993-08-09	Assiniboine R. at Portage la Prairie W.T.P. reservoir	21.0	---	---	---	110	---	794
WQ0014	1994-07-05	Assiniboine R. at Portage la Prairie W.T.P. reservoir	22.0	---	---	---	20	---	1140
WQ0014	1994-08-09	Assiniboine R. at Portage la Prairie W.T.P. reservoir	19.0	---	---	---	10	---	802
WQ0014	1994-09-06	Assiniboine R. at Portage la Prairie W.T.P. reservoir	18.0	---	---	---	30	---	750
WQ0014	1995-04-05	Assiniboine R. at Portage la Prairie W.T.P. reservoir	0.0	---	---	---	< 10	---	555
WQ0014	1995-05-01	Assiniboine R. at Portage la Prairie W.T.P. reservoir	9.0	---	---	---	< 10	---	449
WQ0014	1996-04-02	Assiniboine R. at Portage la Prairie W.T.P. reservoir	0.0	---	---	---	< 10	---	947
WQ0014	1996-05-06	Assiniboine R. at Portage la Prairie W.T.P. reservoir	11.0	---	---	---	< 10	---	601
WQ0014	1996-06-10	Assiniboine R. at Portage la Prairie W.T.P. reservoir	22.0	---	---	---	20	---	853
WQ0014	1997-04-10	Assiniboine R. at Portage la Prairie W.T.P. reservoir	0.5	---	---	---	< 10	---	519
WQ0014	1997-05-05	Assiniboine R. at Portage la Prairie W.T.P. reservoir	9.5	---	---	---	< 10	---	623
WQ0014	1998-04-08	Assiniboine R. at Portage la Prairie W.T.P. reservoir	3.0	---	---	---	30	---	417
WQ0014	1999-04-07	Assiniboine R. at Portage la Prairie W.T.P. reservoir	5.0	---	---	---	< 10	---	547
WQ0014	1999-04-13	Assiniboine R. at Portage la Prairie W.T.P. reservoir	10.0	---	---	---	< 10	---	616
WQ0014	1999-05-03	Assiniboine R. at Portage la Prairie W.T.P. reservoir	14.0	---	---	---	20	---	675
WQ0014	1999-06-01	Assiniboine R. at Portage la Prairie W.T.P. reservoir	16.0	---	---	---	10	---	873
WQ0014	2000 No Flow								
WQ0014	2001-04-11	Assiniboine R. at Portage la Prairie W.T.P. reservoir	0.0	---	---	---	---	---	510
WQ0014	2001-05-07	Assiniboine R. at Portage la Prairie W.T.P. reservoir	11.5	---	---	---	---	---	659
WQ0014	2001-07-04	Assiniboine R. at Portage la Prairie W.T.P. reservoir	22.0	---	---	---	---	---	969
Whitemud River									
WQ0197	1973-05-24	Whitemud R. at Westbourne	15.0	< 240	---	---	---	---	600
WQ0197	1973-07-26	Whitemud R. at Westbourne	22.0	1100	460	---	---	---	620
WQ0197	1973-10-04	Whitemud R. at Westbourne	---	750	---	---	---	---	560
WQ0197	1974-01-22	Whitemud R. at Westbourne	0.0	11000	---	---	---	---	750
WQ0197	1974-01-31	Whitemud R. at Westbourne	0.0	460	---	---	---	---	900
WQ0197	1974-04-22	Whitemud R. at Westbourne	3.0	1100	43	---	---	---	300
WQ0197	1974-08-26	Whitemud R. at Westbourne	---	1500	750	---	---	---	626
WQ0197	1974-10-16	Whitemud R. at Westbourne	6.5	93	93	---	---	---	742
WQ0197	1975-02-11	Whitemud R. at Westbourne	0.0	460	150	---	---	---	880
WQ0197	1975-06-03	Whitemud R. at Westbourne	16.0	140	23	---	---	---	642
WQ0197	1975-09-03	Whitemud R. at Westbourne	16.0	> 1500	---	---	---	---	523
WQ0197	1975-11-24	Whitemud R. at Westbourne	0.0	23	23	---	---	---	644
WQ0197	1976-02-11	Whitemud R. at Westbourne	0.0	460	93	---	---	---	918
WQ0197	1976-04-29	Whitemud R. at Westbourne	13.5	93	9	---	---	---	431
WQ0197	1976-07-05	Whitemud R. at Westbourne	20.5	4600	4600	---	---	---	670
WQ0197	1976-09-14	Whitemud R. at Westbourne	13.5	1100	---	---	---	---	708
WQ0197	1977-01-05	Whitemud R. at Westbourne	0.0	23	23	---	---	---	1350
WQ0197	1977-04-28	Whitemud R. at Westbourne	10.0	460	240	---	---	---	558
WQ0197	1977-07-14	Whitemud R. at Westbourne	20.0	1100	240	---	---	---	463
WQ0197	1977-10-12	Whitemud R. at Westbourne	6.0	460	460	---	---	---	678
WQ0197	1978-01-24	Whitemud R. at Westbourne	0.0	43	9	---	---	---	855
WQ0197	1978-02-14	Whitemud R. at Westbourne	0.0	23	23	---	---	---	822
WQ0197	1978-03-29	Whitemud R. at Westbourne	1.5	460	240	---	---	---	529
WQ0197	1978-04-18	Whitemud R. at Westbourne	5.0	2400	43	---	---	---	487
WQ0197	1978-05-16	Whitemud R. at Westbourne	18.0	7	7	---	---	---	632
WQ0197	1978-06-20	Whitemud R. at Westbourne	16.0	150	93	---	---	---	668
WQ0197	1978-07-25	Whitemud R. at Westbourne	27.0	2400	93	---	---	---	561
WQ0197	1978-08-24	Whitemud R. at Westbourne	20.0	150	93	---	---	---	730
WQ0197	1978-09-21	Whitemud R. at Westbourne	12.5	1500	460	---	---	---	567
WQ0197	1978-10-16	Whitemud R. at Westbourne	6.0	460	240	---	---	---	633
WQ0197	1978-11-09	Whitemud R. at Westbourne	2.5	1500	460	---	---	---	611
WQ0197	1978-12-12	Whitemud R. at Westbourne	0.0	460	75	---	---	---	844
WQ0197	1979-01-18	Whitemud R. at Westbourne	0.0	150	93	---	---	---	846
WQ0197	1979-02-15	Whitemud R. at Westbourne	0.5	75	9	---	---	---	882
WQ0197	1979-03-15	Whitemud R. at Westbourne	1.5	240	4	---	---	---	781
WQ0197	1979-04-25	Whitemud R. at Westbourne	1.5	11000	460	---	---	---	276
WQ0197	1979-04-30	Whitemud R. at Westbourne	5.0	460	93	---	---	---	351
WQ0197	1979-05-17	Whitemud R. at Westbourne	14.5	150	9	---	---	---	415
WQ0197	1979-06-20	Whitemud R. at Westbourne	18.0	3900	9	---	---	---	546
WQ0197	1979-07-19	Whitemud R. at Westbourne	25.0	1500	93	---	---	---	578
WQ0197	1979-08-22	Whitemud R. at Westbourne	22.0	1500	93	---	---	---	610
WQ0197	1979-09-24	Whitemud R. at Westbourne	15.5	24000	24000	---	---	---	655
WQ0197	1979-10-16	Whitemud R. at Westbourne	9.5	210	75	---	---	---	669
WQ0197	1979-11-08	Whitemud R. at Westbourne	1.0	460	290	---	---	---	641
WQ0197	1979-12-03	Whitemud R. at Westbourne	0.0	23	9	---	---	---	814
WQ0197	1980-01-15	Whitemud R. at Westbourne	3.0	23	9	---	---	---	935
WQ0197	1980-02-18	Whitemud R. at Westbourne	0.0	1100	1100	---	---	---	863
WQ0197	1980-03-20	Whitemud R. at Westbourne	1.0	150	150	---	---	---	807
WQ0197	1980-04-09	Whitemud R. at Westbourne	1.5	93	43	---	---	---	426
WQ0197	1980-04-14	Whitemud R. at Westbourne	---	150	150	---	---	---	---

Appendix 6. (Continued).

Site	Sample Date	Location	Temperature Degrees C	Total Coliform Bacteria (MPN) Bacteria/100 mL	Fecal Coliform Bacteria (MPN) Bacteria/100 mL	Total Coliform Bacteria (MF) Bacteria/100 mL	Fecal Coliform Bacteria (MF) Bacteria/100 mL	*Escherichia coli* Bacteria Bacteria/100 mL	Specific Conductivity Laboratory uS/cm
WQ0197	1980-05-08	Whitemud R. at Westbourne	11.5	290	43	---	---	---	582
WQ0197	1980-06-17	Whitemud R. at Westbourne	20.0	460	240	---	---	---	699
WQ0197	1980-07-17	Whitemud R. at Westbourne	23.0	460	4	---	---	---	599
WQ0197	1980-08-14	Whitemud R. at Westbourne	20.5	1500	1500	---	---	---	529
WQ0197	1980-09-10	Whitemud R. at Westbourne	18.0	1100	460	---	---	---	572
WQ0197	1980-10-21	Whitemud R. at Westbourne	6.0	1100	460	---	---	---	615
WQ0197	1980-11-12	Whitemud R. at Westbourne	1.5	1100	150	---	---	---	628
WQ0197	1980-12-18	Whitemud R. at Westbourne	0.0	240	240	---	---	---	976
WQ0197	1981-01-07	Whitemud R. at Westbourne	0.0	93	43	---	---	---	1260
WQ0197	1981-02-12	Whitemud R. at Westbourne	0.0	150	93	---	---	---	1050
WQ0197	1981-03-12	Whitemud R. at Westbourne	0.0	460	43	---	---	---	590
WQ0197	1981-04-15	Whitemud R. at Westbourne	9.0	43	23	---	---	---	462
WQ0197	1981-05-21	Whitemud R. at Westbourne	20.5	120	43	---	---	---	610
WQ0197	1981-06-17	Whitemud R. at Westbourne	17.0	1100	460	---	---	---	565
WQ0197	1981-07-15	Whitemud R. at Westbourne	24.0	1500	93	---	---	---	594
WQ0197	1981-08-20	Whitemud R. at Westbourne	24.5	460	93	---	---	---	571
WQ0197	1981-09-16	Whitemud R. at Westbourne	16.0	43	23	---	---	---	514
WQ0197	1981-10-21	Whitemud R. at Westbourne	4.0	43	43	---	---	---	549
WQ0197	1981-11-18	Whitemud R. at Westbourne	2.0	23	23	---	---	---	498
WQ0197	1981-12-09	Whitemud R. at Westbourne	0.8	93	---	---	---	---	779
WQ0197	1982-01-20	Whitemud R. at Westbourne	0.0	4	4	---	---	---	1330
WQ0197	1982-02-22	Whitemud R. at Westbourne	0.0	150	150	---	---	---	1020
WQ0197	1982-03-18	Whitemud R. at Westbourne	0.0	460	150	---	---	---	717
WQ0197	1982-04-27	Whitemud R. at Westbourne	9.5	9	4	---	---	---	444
WQ0197	1982-05-18	Whitemud R. at Westbourne	12.2	240	240	---	---	---	575
WQ0197	1982-06-14	Whitemud R. at Westbourne	19.0	150	15	---	---	---	582
WQ0197	1982-07-19	Whitemud R. at Westbourne	22.5	1100	460	---	---	---	530
WQ0197	1982-08-25	Whitemud R. at Westbourne	17.5	11000	11000	---	---	---	556
WQ0197	1982-09-20	Whitemud R. at Westbourne	12.0	43	9	---	---	---	631
WQ0197	1982-10-06	Whitemud R. at Westbourne	7.0	150	43	---	---	---	670
WQ0197	1982-11-08	Whitemud R. at Westbourne	2.2	93	23	---	---	---	611
WQ0197	1982-12-14	Whitemud R. at Westbourne	2.2	93	21	---	---	---	938
WQ0197	1983-01-25	Whitemud R. at Westbourne	0.0	23	9	---	---	---	870
WQ0197	1983-03-03	Whitemud R. at Westbourne	0.0	23	23	---	---	---	847
WQ0197	1983-03-28	Whitemud R. at Westbourne	7.0	39	14	---	---	---	792
WQ0197	1983-04-27	Whitemud R. at Westbourne	9.0	750	23	---	---	---	319
WQ0197	1983-05-16	Whitemud R. at Westbourne	9.5	23	23	---	---	---	528
WQ0197	1983-06-29	Whitemud R. at Westbourne	22.0	93	93	---	---	---	607
WQ0197	1983-07-20	Whitemud R. at Westbourne	32.0	4600	240	---	---	---	594
WQ0197	1983-09-06	Whitemud R. at Westbourne	17.0	210	23	---	---	---	631
WQ0197	1983-09-26	Whitemud R. at Westbourne	16.5	23	4	---	---	---	656
WQ0197	1983-10-24	Whitemud R. at Westbourne	12.0	---	---	---	---	---	624
WQ0197	1983-11-15	Whitemud R. at Westbourne	3.0	2400	1100	---	---	---	608
WQ0197	1983-12-06	Whitemud R. at Westbourne	0.0	23	23	---	---	---	792
WQ0197	1984-01-18	Whitemud R. at Westbourne	0.0	93	93	---	---	---	1230
WQ0197	1986-10-14	Whitemud R. at Westbourne	---	---	---	---	70	---	617
WQ0197	1986-11-25	Whitemud R. at Westbourne	2.0	---	---	---	50	---	---
WQ0197	1987-01-12	Whitemud R. at Westbourne	0.0	---	---	---	10	---	859
WQ0197	1987-02-17	Whitemud R. at Westbourne	0.0	---	---	---	10	---	851
WQ0197	1987-03-31	Whitemud R. at Westbourne	0.5	---	---	---	10	---	460
WQ0197	1987-05-12	Whitemud R. at Westbourne	15.0	---	---	---	< 10	---	---
WQ0197	1987-06-22	Whitemud R. at Westbourne	25.0	---	---	---	20	---	---
WQ0197	1987-07-29	Whitemud R. at Westbourne	25.0	---	---	---	160	---	---
WQ0197	1987-09-03	Whitemud R. at Westbourne	17.0	---	---	---	410	---	---
WQ0197	1987-10-22	Whitemud R. at Westbourne	2.0	---	---	---	20	---	586
WQ0197	1987-12-02	Whitemud R. at Westbourne	0.0	---	---	---	< 10	---	824
WQ0197	1988-01-11	Whitemud R. at Westbourne	0.0	---	---	---	< 10	---	1090
WQ0197	1988-03-01	Whitemud R. at Westbourne	0.0	---	---	---	10	---	1310
WQ0197	1988-04-13	Whitemud R. at Westbourne	3.0	---	---	---	< 10	---	382
WQ0197	1988-05-24	Whitemud R. at Westbourne	16.0	---	---	---	10	---	637
WQ0197	1988-06-21	Whitemud R. at Westbourne	24.0	---	---	---	10	---	617
WQ0197	1988-08-16	Whitemud R. at Westbourne	24.5	---	---	---	30	---	618
WQ0197	1988-09-28	Whitemud R. at Westbourne	11.0	---	---	---	10	---	879
WQ0197	1988-11-07	Whitemud R. at Westbourne	2.5	---	---	---	< 10	---	738
WQ0197	1988-12-12	Whitemud R. at Westbourne	0.0	---	---	---	10	---	968
WQ0197	1989-02-06	Whitemud R. at Westbourne	0.0	---	---	---	< 10	---	1000
WQ0197	1989-03-06	Whitemud R. at Westbourne	0.0	---	---	---	< 10	---	943
WQ0197	1989-05-01	Whitemud R. at Westbourne	6.5	---	---	---	10	---	516
WQ0197	1989-06-05	Whitemud R. at Westbourne	16.0	---	---	---	30	---	---
WQ0197	1989-08-01	Whitemud R. at Westbourne	23.5	---	---	---	30	---	623
WQ0197	1989-09-05	Whitemud R. at Westbourne	18.5	---	---	---	20	---	622
WQ0197	1989-11-06	Whitemud R. at Westbourne	1.0	---	---	---	10	---	667
WQ0197	1989-12-11	Whitemud R. at Westbourne	0.0	---	---	---	40	---	916
WQ0197	1990-02-06	Whitemud R. at Westbourne	0.0	---	---	50	< 10	---	1010
WQ0197	1990-03-05	Whitemud R. at Westbourne	0.0	---	---	---	10	---	868
WQ0197	1990-05-07	Whitemud R. at Westbourne	12.0	---	---	---	10	---	582
WQ0197	1990-06-04	Whitemud R. at Westbourne	12.0	---	---	---	20	---	672
WQ0197	1990-08-07	Whitemud R. at Westbourne	23.0	---	---	---	30	---	657
WQ0197	1990-09-04	Whitemud R. at Westbourne	20.0	---	---	---	< 10	---	623
WQ0197	1990-11-05	Whitemud R. at Westbourne	0.7	---	---	---	60	---	749
WQ0197	1990-12-03	Whitemud R. at Westbourne	0.0	---	---	---	< 10	---	845
WQ0197	1991-02-04	Whitemud R. at Westbourne	0.0	---	---	---	< 10	---	959
WQ0197	1991-03-04	Whitemud R. at Westbourne	0.0	---	---	---	20	---	850
WQ0197	1991-05-06	Whitemud R. at Westbourne	4.0	---	---	---	10	---	617
WQ0197	1991-06-03	Whitemud R. at Westbourne	21.0	---	---	---	70	---	673
WQ0197	1991-08-06	Whitemud R. at Westbourne	18.9	---	---	---	40	---	653
WQ0197	1991-09-09	Whitemud R. at Westbourne	17.8	---	---	---	20	---	709
WQ0197	1992-06-24	Whitemud R. at Westbourne	17.5	---	---	---	410	---	664
WQ0197	1992-09-30	Whitemud R. at Westbourne	10.5	---	---	---	10	---	689
WQ0197	1993-01-04	Whitemud R. at Westbourne	0.0	---	---	---	< 10	---	873
WQ0197	1993-04-15	Whitemud R. at Westbourne	2.5	---	---	---	< 10	---	456
WQ0197	1993-06-23	Whitemud R. at Westbourne	22.5	---	---	---	30	---	635
WQ0197	1993-09-29	Whitemud R. at Westbourne	9.0	---	---	---	---	---	660
WQ0197	1994-01-04	Whitemud R. at Westbourne	0.0	---	---	---	< 10	---	1110
WQ0197	1994-04-05	Whitemud R. at Westbourne	0.0	---	---	---	10	---	559
WQ0197	1994-07-04	Whitemud R. at Westbourne	19.0	---	---	---	40	---	595
WQ0197	1994-10-03	Whitemud R. at Westbourne	8.0	---	---	---	50	---	645
WQ0197	1995-01-03	Whitemud R. at Westbourne	0.0	---	---	---	< 10	---	864
WQ0197	1995-04-04	Whitemud R. at Westbourne	0.0	---	---	---	10	---	412
WQ0197	1995-07-04	Whitemud R. at Westbourne	19.0	---	---	---	40	---	612
WQ0197	1995-10-03	Whitemud R. at Westbourne	10.0	---	---	---	< 10	---	656
WQ0197	1996-01-02	Whitemud R. at Westbourne	0.0	---	---	---	< 10	---	763
WQ0197	1996-04-01	Whitemud R. at Westbourne	0.0	---	---	---	< 10	---	774
WQ0197	1996-05-13	Whitemud R. at Westbourne	7.5	---	---	---	10	---	462
WQ0197	1996-06-10	Whitemud R. at Westbourne	23.0	---	---	---	< 10	---	636
WQ0197	1996-07-08	Whitemud R. at Westbourne	20.0	---	---	---	20	---	639

Appendix 6. (Continued).

Site	Sample Date	Location	Temperature Degrees C	Total Coliform Bacteria (MPN) Bacteria/100 mL	Fecal Coliform Bacteria (MPN) Bacteria/100 mL	Total Coliform Bacteria (MF) Bacteria/100 mL	Fecal Coliform Bacteria (MF) Bacteria/100 mL	*Escherichia coli* Bacteria Bacteria/100 mL	Specific Conductivity Laboratory uS/cm
WQ0197	1996-07-15	Whitemud R. at Westbourne	—	—	—	—	< 10	—	626
WQ0197	1996-08-12	Whitemud R. at Westbourne	21.5	—	—	—	40	—	583
WQ0197	1996-09-29	Whitemud R. at Westbourne	9.0	—	—	—	< 10	—	669
WQ0197	1997-01-06	Whitemud R. at Westbourne	0.0	—	—	—	< 10	—	869
WQ0197	1997-04-09	Whitemud R. at Westbourne	0.0	—	—	—	< 10	—	525
WQ0197	1997-05-13	Whitemud R. at Westbourne	12.0	—	—	—	30	—	585
WQ0197	1997-06-10	Whitemud R. at Westbourne	24.0	—	—	—	—	—	720
WQ0197	1997-07-07	Whitemud R. at Westbourne	18.0	—	—	—	40	—	571
WQ0197	1997-07-15	Whitemud R. at Westbourne	26.0	—	—	—	< 10	—	601
WQ0197	1997-08-19	Whitemud R. at Westbourne	18.0	—	—	—	70	—	733
WQ0197	1997-10-06	Whitemud R. at Westbourne	12.0	—	—	—	10	—	701
WQ0197	1998-01-05	Whitemud R. at Westbourne	0.0	—	—	—	< 10	—	869
WQ0197	1998-04-07	Whitemud R. at Westbourne	4.0	—	—	—	10	—	386
WQ0197	1998-05-20	Whitemud R. at Westbourne	20.0	—	—	—	< 10	—	646
WQ0197	1998-06-25	Whitemud R. at Westbourne	23.0	—	—	—	70	—	685
WQ0197	1998-07-06	Whitemud R. at Westbourne	21.0	—	—	—	50	—	745
WQ0197	1998-07-29	Whitemud R. at Westbourne	24.0	—	—	—	20	—	745
WQ0197	1998-08-20	Whitemud R. at Westbourne	22.0	—	—	—	70	—	704
WQ0197	1998-10-04	Whitemud R. at Westbourne	9.0	—	—	—	30	—	660
WQ0197	1999-04-06	Whitemud R. at Westbourne	3.0	—	—	—	—	—	524
WQ0197	1999-05-20	Whitemud R. at Westbourne	14.0	—	—	—	30	—	871
WQ0197	1999-06-21	Whitemud R. at Westbourne	22.0	—	—	—	< 10	—	901
WQ0197	1999-07-07	Whitemud R. at Westbourne	18.0	—	—	—	40	—	809
WQ0197	1999-07-21	Whitemud R. at Westbourne	25.0	—	—	—	10	—	756
WQ0197	1999-08-24	Whitemud R. at Westbourne	21.0	—	—	—	30	—	681
WQ0197	1999-10-04	Whitemud R. at Westbourne	6.0	—	—	—	10	—	643
WQ0197	2000-01-10	Whitemud R. at Westbourne	0.0	—	—	—	< 10	—	976
WQ0197	2000-04-03	Whitemud R. at Westbourne	3.0	—	—	—	< 10	< 10	544
WQ0197	2000-05-15	Whitemud R. at Westbourne	12.0	—	—	—	1800	1220	671
WQ0197	2000-06-19	Whitemud R. at Westbourne	18.0	—	—	—	30	30	633
WQ0197	2000-07-04	Whitemud R. at Westbourne	21.0	—	—	—	20	20	681
WQ0197	2000-07-18	Whitemud R. at Westbourne	21.0	—	—	—	50	40	756
WQ0197	2000-08-16	Whitemud R. at Westbourne	18.0	—	—	—	80	70	650
WQ0197	2000-10-02	Whitemud R. at Westbourne	9.0	—	—	—	20	20	678
WQ0197	2001-01-10	Whitemud R. at Westbourne	0.0	—	—	—	< 10	< 10	915
WQ0197	2001-04-10	Whitemud R. at Westbourne	0.0	—	—	—	—	—	390
WQ0197	2001-05-15	Whitemud R. at Westbourne	—	—	—	—	—	—	562
WQ0197	2001-06-12	Whitemud R. at Westbourne	—	—	—	—	—	—	686
WQ0197	2001-07-03	Whitemud R. at Westbourne	20.0	—	—	—	—	—	664
WQ0197	2001-07-16	Whitemud R. at Westbourne	—	—	—	—	—	—	713
WQ0197	2001-08-14	Whitemud R. at Westbourne	—	—	—	—	—	—	734
WQ0197	2001-10-01	Whitemud R. at Westbourne	13.0	—	—	—	—	—	679
Waterhen River									
WQ0561	1981-08-18	Waterhen R. at PR 328 at Waterhen	23.0	9	0	—	—	—	1420
WQ0561	1981-09-14	Waterhen R. at PR 328 at Waterhen	17.0	15	4	—	—	—	1490
WQ0561	1981-10-19	Waterhen R. at PR 328 at Waterhen	5.0	0	0	—	—	—	1500
WQ0561	1981-11-16	Waterhen R. at PR 328 at Waterhen	2.5	0	0	—	—	—	1550
WQ0561	1981-12-07	Waterhen R. at PR 328 at Waterhen	0.0	—	—	—	—	—	1790
WQ0561	1982-01-25	Waterhen R. at PR 328 at Waterhen	0.0	0	0	—	—	—	3590
WQ0561	1982-02-23	Waterhen R. at PR 328 at Waterhen	0.0	15	4	—	—	—	5600
WQ0561	1982-03-22	Waterhen R. at PR 328 at Waterhen	0.0	4	4	—	—	—	6667
WQ0561	1982-05-26	Waterhen R. at PR 328 at Waterhen	20.5	0	0	—	—	—	1550
WQ0561	1982-07-14	Waterhen R. at PR 328 at Waterhen	23.0	9	9	—	—	—	1440
WQ0561	1982-08-31	Waterhen R. at PR 328 at Waterhen	15.0	4	4	—	—	—	1500
WQ0561	1982-09-30	Waterhen R. at PR 328 at Waterhen	7.0	9	0	—	—	—	1550
WQ0561	1982-10-28	Waterhen R. at PR 328 at Waterhen	6.5	15	7	—	—	—	1510
WQ0561	1982-11-24	Waterhen R. at PR 328 at Waterhen	0.0	0	0	—	—	—	2000
WQ0561	1982-12-29	Waterhen R. at PR 328 at Waterhen	0.0	4	0	—	—	—	2170
WQ0561	1983-05-25	Waterhen R. at PR 328 at Waterhen	15.0	0	0	—	—	—	1250
WQ0561	1983-06-22	Waterhen R. at PR 328 at Waterhen	21.0	4	—	—	—	—	1250
WQ0561	1983-08-04	Waterhen R. at PR 328 at Waterhen	29.0	93	75	—	—	—	1350
WQ0561	1983-08-31	Waterhen R. at PR 328 at Waterhen	29.0	15	7	—	—	—	1350
WQ0561	1983-10-04	Waterhen R. at PR 328 at Waterhen	11.0	4	0	—	—	—	1440
WQ0561	1983-11-02	Waterhen R. at PR 328 at Waterhen	8.0	0	0	—	—	—	1420
WQ0561	1983-11-30	Waterhen R. at PR 328 at Waterhen	0.0	4	0	—	—	—	1520
WQ0561	1983-12-20	Waterhen R. at PR 328 at Waterhen	0.0	4	0	—	—	—	1900
WQ0561	1984-02-14	Waterhen R. at PR 328 at Waterhen	0.0	4	0	—	—	—	2100
WQ0561	1984-03-20	Waterhen R. at PR 328 at Waterhen	0.0	0	0	—	—	—	2040
WQ0561	1987-07-08	Waterhen R. at PR 328 at Waterhen	21.0	—	—	—	10	—	—
WQ0561	1987-11-04	Waterhen R. at PR 328 at Waterhen	3.0	—	—	—	20	—	—
WQ0561	1988-05-04	Waterhen R. at PR 328 at Waterhen	4.0	—	—	—	60	—	1170
WQ0561	1988-07-04	Waterhen R. at PR 328 at Waterhen	22.5	—	—	—	< 10	—	1260
WQ0561	1988-10-03	Waterhen R. at PR 328 at Waterhen	8.5	—	1414	—	< 10	—	1400
WQ0561	1989-04-10	Waterhen R. at PR 328 at Waterhen	0.0	—	—	—	< 10	—	2020
WQ0561	1989-07-10	Waterhen R. at PR 328 at Waterhen	21.0	—	—	—	< 10	—	1440
WQ0561	1989-10-10	Waterhen R. at PR 328 at Waterhen	8.0	—	—	—	< 10	—	1520
WQ0561	1990-04-09	Waterhen R. at PR 328 at Waterhen	0.5	—	—	—	< 10	—	2140
WQ0561	1990-06-25	Waterhen R. at PR 328 at Waterhen	22.5	—	—	—	< 10	—	1300
WQ0561	1990-10-09	Waterhen R. at PR 328 at Waterhen	5.1	—	—	—	< 10	—	1430
WQ0561	1991-04-15	Waterhen R. at PR 328 at Waterhen	1.0	—	—	—	< 10	—	1470
WQ0561	1991-06-24	Waterhen R. at PR 328 at Waterhen	18.2	—	—	—	< 10	—	1410
WQ0561	1991-09-30	Waterhen R. at PR 328 at Waterhen	8.0	—	—	—	< 10	—	1520
WQ0561	1992-04-13	Waterhen R. at PR 328 at Waterhen	0.0	—	—	—	< 10	—	2210
WQ0561	1992-06-22	Waterhen R. at PR 328 at Waterhen	15.0	—	—	—	< 10	—	1280
WQ0561	1992-09-28	Waterhen R. at PR 328 at Waterhen	6.0	—	—	—	< 10	—	1400
WQ0561	1993-04-13	Waterhen R. at PR 328 at Waterhen	4.0	—	—	—	< 10	—	1610
WQ0561	1993-06-21	Waterhen R. at PR 328 at Waterhen	20.5	—	—	—	10	—	1410
WQ0561	1993-09-27	Waterhen R. at PR 328 at Waterhen	9.5	—	—	—	—	—	1450
WQ0561	1994-04-11	Waterhen R. at PR 328 at Waterhen	0.0	—	—	—	< 10	—	1980
WQ0561	1994-06-27	Waterhen R. at PR 328 at Waterhen	21.0	—	—	—	< 10	—	1340
WQ0561	1994-08-29	Waterhen R. at PR 328 at Waterhen	—	—	—	—	< 10	—	1440
WQ0561	1994-09-26	Waterhen R. at PR 328 at Waterhen	11.0	—	—	—	< 10	—	1490
WQ0561	1995-04-18	Waterhen R. at PR 328 at Waterhen	1.0	—	—	—	< 10	—	1620
WQ0561	1995-07-24	Waterhen R. at PR 328 at Waterhen	—	—	—	—	10	—	1170
WQ0561	1995-08-23	Waterhen R. at PR 328 at Waterhen	—	—	—	—	—	—	—
WQ0561	1995-10-10	Waterhen R. at PR 328 at Waterhen	—	—	—	—	< 10	—	1290
WQ0561	1996-05-13	Waterhen R. at PR 328 at Waterhen	5.0	—	—	—	< 10	—	1190
WQ0561	1996-06-24	Waterhen R. at PR 328 at Waterhen	14.0	—	—	—	< 10	—	1210
WQ0561	1996-09-30	Waterhen R. at PR 328 at Waterhen	8.0	—	—	—	< 10	—	1240
WQ0561	1997-04-22	Waterhen R. at PR 328 at Waterhen	2.5	—	—	—	< 10	—	1410
WQ0561	1997-06-26	Waterhen R. at PR 328 at Waterhen	21.5	—	—	—	< 10	—	1240
WQ0561	1997-10-21	Waterhen R. at PR 328 at Waterhen	3.0	—	—	—	< 10	—	1430
WQ0561	1998-04-27	Waterhen R. at PR 328 at Waterhen	12.0	—	—	—	< 10	—	1510
WQ0561	1998-07-08	Waterhen R. at PR 328 at Waterhen	23.5	—	—	—	< 10	—	1350
WQ0561	1998-10-14	Waterhen R. at PR 328 at Waterhen	6.5	—	—	—	< 10	—	1410
WQ0561	1999-04-19	Waterhen R. at PR 328 at Waterhen	5.0	—	—	—	< 10	—	1390

Appendix 6. (Continued).

Site	Sample Date	Location	Temperature Degrees C	Total Coliform Bacteria (MPN) Bacteria/100 mL	Fecal Coliform Bacteria (MPN) Bacteria/100 mL	Total Coliform Bacteria (MF) Bacteria/100 mL	Fecal Coliform Bacteria (MF) Bacteria/100 mL	*Escherichia coli* Bacteria Bacteria/100 mL	Specific Conductivity Laboratory uS/cm
WQ0561	1999-07-06	Waterhen R. at PR 328 at Waterhen	21.5	—	—	—	< 10	—	1270
WQ0561	1999-09-20	Waterhen R. at PR 328 at Waterhen	11.5	—	—	—	< 10	—	1350
WQ0561	2000-04-18	Waterhen R. at PR 328 at Waterhen	2.5	—	—	—	< 10	< 10	1440
WQ0561	2000-06-27	Waterhen R. at PR 328 at Waterhen	18.0	—	—	—	10	< 10	1350
WQ0561	2000-10-04	Waterhen R. at PR 328 at Waterhen	3.5	—	—	—	< 10	< 10	1440
WQ0561	2001-04-22	Waterhen R. at PR 328 at Waterhen	0.0	—	—	—	—	—	1510
WQ0561	2001-07-16	Waterhen R. at PR 328 at Waterhen	26.0	—	—	—	—	—	1280
WQ0561	2001-09-25	Waterhen R. at PR 328 at Waterhen	9.0	—	—	—	—	—	1180
Fairford River									
WQ0364	1978-01-16	Fairford R. at PTH 6	0.0	0	0	—	—	—	1630
WQ0364	1978-02-21	Fairford R. at PTH 6	0.0	0	0	—	—	—	1730
WQ0364	1978-03-20	Fairford R. at PTH 6	0.0	4600	0	—	—	—	1790
WQ0364	1978-04-24	Fairford R. at PTH 6	6.5	4	0	—	—	—	1750
WQ0364	1978-05-16	Fairford R. at PTH 6	15.0	9	0	—	—	—	1370
WQ0364	1978-06-19	Fairford R. at PTH 6	18.0	4	0	—	—	—	1390
WQ0364	1978-07-24	Fairford R. at PTH 6	21.0	9	4	—	—	—	1460
WQ0364	1978-08-29	Fairford R. at PTH 6	18.0	93	9	—	—	—	1420
WQ0364	1978-09-26	Fairford R. at PTH 6	12.0	4	4	—	—	—	1450
WQ0364	1978-10-23	Fairford R. at PTH 6	6.5	9	4	—	—	—	1470
WQ0364	1978-11-13	Fairford R. at PTH 6	1.5	0	0	—	—	—	1530
WQ0364	1978-12-11	Fairford R. at PTH 6	0.5	0	0	—	—	—	1710
WQ0364	1979-01-29	Fairford R. at PTH 6	0.0	0	0	—	—	—	1820
WQ0364	1979-02-19	Fairford R. at PTH 6	0.0	9	0	—	—	—	1770
WQ0364	1979-03-20	Fairford R. at PTH 6	0.0	0	0	—	—	—	1840
WQ0364	1979-04-30	Fairford R. at PTH 6	5.5	4	0	—	—	—	1800
WQ0364	1979-05-07	Fairford R. at PTH 6	3.5	9	0	—	—	—	1710
WQ0364	1979-05-28	Fairford R. at PTH 6	11.0	23	0	—	—	—	1130
WQ0364	1979-06-25	Fairford R. at PTH 6	18.5	4	0	—	—	—	1470
WQ0364	1979-07-23	Fairford R. at PTH 6	23.0	4	0	—	—	—	1440
WQ0364	1979-08-27	Fairford R. at PTH 6	18.0	23	9	—	—	—	1470
WQ0364	1979-10-01	Fairford R. at PTH 6	11.5	0	0	—	—	—	1480
WQ0364	1979-10-23	Fairford R. at PTH 6	5.0	39	39	—	—	—	1450
WQ0364	1979-11-20	Fairford R. at PTH 6	1.2	0	0	—	—	—	1470
WQ0364	1979-12-13	Fairford R. at PTH 6	0.0	0	0	—	—	—	1510
WQ0364	1980-01-07	Fairford R. at PTH 6	0.0	0	0	—	—	—	1590
WQ0364	1980-02-04	Fairford R. at PTH 6	1.5	9	0	—	—	—	1660
WQ0364	1980-03-11	Fairford R. at PTH 6	0.0	0	0	—	—	—	1680
WQ0364	1980-04-17	Fairford R. at PTH 6	6.0	0	0	—	—	—	1640
WQ0364	1980-05-05	Fairford R. at PTH 6	12.0	9	9	—	—	—	1390
WQ0364	1980-06-23	Fairford R. at PTH 6	23.0	23	4	—	—	—	1480
WQ0364	1980-07-21	Fairford R. at PTH 6	19.5	23	9	—	—	—	1470
WQ0364	1980-08-18	Fairford R. at PTH 6	19.0	9	4	—	—	—	1440
WQ0364	1980-09-15	Fairford R. at PTH 6	14.5	4	4	—	—	—	1390
WQ0364	1980-10-21	Fairford R. at PTH 6	4.5	0	0	—	—	—	1390
WQ0364	1980-11-25	Fairford R. at PTH 6	1.5	23	0	—	—	—	1490
WQ0364	1980-12-15	Fairford R. at PTH 6	0.0	0	0	—	—	—	1510
WQ0364	1981-01-05	Fairford R. at PTH 6	0.5	0	0	—	—	—	1600
WQ0364	1981-02-10	Fairford R. at PTH 6	0.5	0	0	—	—	—	1630
WQ0364	1981-03-10	Fairford R. at PTH 6	1.0	0	0	—	—	—	1720
WQ0364	1981-04-13	Fairford R. at PTH 6	1.0	4	4	—	—	—	1500
WQ0364	1981-05-19	Fairford R. at PTH 6	15.0	4	0	—	—	—	1460
WQ0364	1981-06-15	Fairford R. at PTH 6	14.0	15	4	—	—	—	1410
WQ0364	1981-07-13	Fairford R. at PTH 6	24.0	23	0	—	—	—	1450
WQ0364	1981-08-18	Fairford R. at PTH 6	20.0	15	4	—	—	—	1460
WQ0364	1981-09-14	Fairford R. at PTH 6	16.0	4	0	—	—	—	1460
WQ0364	1981-10-19	Fairford R. at PTH 6	5.0	0	0	—	—	—	1470
WQ0364	1981-11-16	Fairford R. at PTH 6	3.5	0	0	—	—	—	1450
WQ0364	1981-12-07	Fairford R. at PTH 6	0.0	—	—	—	—	—	1420
WQ0364	1982-01-25	Fairford R. at PTH 6	1.5	0	0	—	—	—	1850
WQ0364	1982-02-23	Fairford R. at PTH 6	15.0	0	0	—	—	—	1900
WQ0364	1982-03-22	Fairford R. at PTH 6	2.5	0	0	—	—	—	1927
WQ0364	1982-04-20	Fairford R. at PTH 6	6.0	9	9	—	—	—	1679
WQ0364	1982-05-27	Fairford R. at PTH 6	19.0	4	0	—	—	—	1550
WQ0364	1982-07-15	Fairford R. at PTH 6	23.5	43	23	—	—	—	1450
WQ0364	1982-08-31	Fairford R. at PTH 6	13.0	15	3	—	—	—	1530
WQ0364	1982-09-28	Fairford R. at PTH 6	7.5	0	0	—	—	—	1560
WQ0364	1982-10-20	Fairford R. at PTH 6	3.0	4	4	—	—	—	1560
WQ0364	1982-11-24	Fairford R. at PTH 6	0.4	0	0	—	—	—	1740
WQ0364	1982-12-29	Fairford R. at PTH 6	1.4	0	0	—	—	—	1810
WQ0364	1983-02-22	Fairford R. at PTH 6	5.1	0	0	—	—	—	1880
WQ0364	1983-03-24	Fairford R. at PTH 6	7.0	0	0	—	—	—	1880
WQ0364	1983-04-18	Fairford R. at PTH 6	—	43	0	—	—	—	1860
WQ0364	1983-05-27	Fairford R. at PTH 6	15.5	0	0	—	—	—	1510
WQ0364	1983-06-22	Fairford R. at PTH 6	20.0	15	4	—	—	—	1530
WQ0364	1983-08-04	Fairford R. at PTH 6	25.0	43	23	—	—	—	1550
WQ0364	1983-08-31	Fairford R. at PTH 6	25.0	7	3	—	—	—	1550
WQ0364	1983-10-04	Fairford R. at PTH 6	11.0	0	0	—	—	—	1590
WQ0364	1983-11-02	Fairford R. at PTH 6	5.0	4	0	—	—	—	1590
WQ0364	1983-11-30	Fairford R. at PTH 6	0.0	0	0	—	—	—	1700
WQ0364	1983-12-20	Fairford R. at PTH 6	0.0	0	0	—	—	—	1850
WQ0364	1984-02-14	Fairford R. at PTH 6	0.0	0	0	—	—	—	1930
WQ0364	1984-03-20	Fairford R. at PTH 6	0.0	0	0	—	—	—	2030
WQ0364	1994-08-29	Fairford R. at PTH 6	—	—	—	—	< 10	—	1830

Appendix 6. (Continued).

Site	Sample Date	Specific Conductivity Field uS/cm	Total Solids mg/L	Total Dissolved Solids mg/L	Total Suspended Solids mg/L	Turbidity Laboratory NTU	Turbidity Field NTU	True Colour Colour Units	pH Laboratory pH Units	pH Field pH Units	Total Alkalinity mg/L	Bicarbonate Alkalinity mg/L	Carbonate Alkalinity mg/L	Hydroxide Alkalinity mg/L	Calcium Extractable mg/L
Assiniboine Diversion est															
WQ0014	1971-04-22	—	550	360	190	—	—	—	7.80	—	140	171	0.0	0.0	—
WQ0014	1972-04-27	—	620	510	110	—	—	—	—	—	—	—	—	—	—
WQ0014	1972-05-24	—	590	550	40	—	—	—	8.40	—	200	215	14.0	0.0	—
WQ0014	1973 No Flow														
WQ0014	1974-04-05	—	1000	640	360	—	—	30	8.12	—	298	363	0.0	0.0	—
WQ0014	1974-05-02	—	610	290	320	130.0	—	120	8.39	—	122	144	2.4	0.0	—
WQ0014	1974-06-04	—	660	450	190	45.0	—	40	7.80	—	209	255	0.0	0.0	—
WQ0014	1975-05-27	—	610	460	150	60.0	—	35	8.10	—	180	220	0.0	0.0	52.5
WQ0014	1976-05-04	—	666	413	273	100.0	—	30	8.20	—	188	229	0.0	0.0	62.5
WQ0014	1977 No Flow														
WQ0391	1978-04-18	600	—	—	832	—	—	—	8.10	8.05	—	—	—	—	—
WQ0391	1979-04-25	410	—	—	1300	—	—	—	7.85	7.75	—	—	—	—	—
WQ0391	1979-04-30	430	—	—	640	—	—	—	7.95	—	—	—	—	—	—
WQ0391	1979-05-17	500	—	—	320	—	—	—	8.10	8.15	—	—	—	—	—
WQ0391	1979-06-20	800	—	—	130	—	—	—	8.20	7.50	—	—	—	—	—
WQ0391	1980 No Flow														
WQ0391	1981 No Flow														
WQ0391	1982-04-27	412	—	—	140	75.0	—	—	8.15	7.41	—	—	—	—	—
WQ0391	1983-04-21	419	—	—	200	75.0	—	—	7.95	—	—	—	—	—	—
WQ0391	1983-05-19	818	—	—	110	50.0	—	—	8.10	7.53	—	—	—	—	—
WQ0391	1984 No Flow														
WQ0014	No Spring Sampl														
WQ0014	1985-11-13	940	656	630	26	10.0	—	10	8.35	8.45	296	356	2.4	0.0	91.5
WQ0014	1986-04-09	—	700	340	360	150.0	—	40	7.90	7.90	148	181	0.0	0.0	49.4
WQ0014	May 86 No Flow														
WQ0014	1986-06-02	—	570	510	60	20.0	41.0	25	8.50	8.50	240	273	9.6	0.0	—
WQ0014	1987-04-06	427	1330	160	1170	> 200.00	> 200.0	40	—	8.05	132	161	0.0	0.0	65.2
WQ0014	1988 No Flow														
WQ0014	1989-04-04	652	550	420	130	73.0	87.0	20	7.90	8.30	202	246.4	0.0	0.0	72.4
WQ0014	1990 No Flow														
WQ0014	1991 No Flow														
WQ0014	1992-04-07	570	760	290	470	> 200.00	256.0	40	8.02	8.05	160	195	< 0.60	< 0.34	68.3
WQ0014	1992-05-04	686	510	450	63	50.0	55.0	< 50	8.26	8.20	184	225	< 0.60	< 0.34	60.3
WQ0014	1993 Aug. Flow														
WQ0014	1993-08-09	817	550	530	23	15.0	25.0	25	8.49	8.55	262	293	13.2	< 0.34	69.4
WQ0014	1994-07-05	—	790	760	31	27.0	31.0	10	8.52	8.40	275	300	< 18.0	< 10.2	67.7
WQ0014	1994-08-09	833	550	550	18	13.0	20.0	15	8.57	8.55	259	280	< 18.0	< 10.2	69.8
WQ0014	1994-09-06	781	560	520	40	28.0	33.0	25	8.66	8.65	254	264	22.8	< 10.2	65.8
WQ0014	1995-04-05	—	400	280	79	59.0	73.0	> 50	7.97	7.95	168	205	< 18.0	< 10.2	45.6
WQ0014	1995-05-01	451	800	420	380	> 200.00	290.0	> 50	7.82	7.70	145	176	< 18.0	< 10.2	55.0
WQ0014	1996-04-02	935	700	640	59	31.0	39.0	30	7.95	7.85	291	355	< 18.0	< 10.2	86.5
WQ0014	1996-05-06	619	600	390	210	140.0	170.0	30	8.11	8.10	166	203	< 18.0	< 10.2	59.0
WQ0014	1996-06-10	889	610	560	44	37.0	46.0	20	8.35	8.20	232	278	< 18.0	< 10.2	63.6
WQ0014	1997-04-10	517	420	340	83	49.0	58.0	70	7.84	7.90	154	188	< 20	< 10	48.3
WQ0014	1997-05-05	—	570	440	130	95.0	110.0	> 50	8.18	8.20	173	212	< 20	< 10	58.2
WQ0014	1998-04-08	410	1000	210	840	450.0	520.0	70	8.00	7.85	126	153	< 20	< 10	64.3
WQ0014	1999-04-07	553	—	360	350	170.0	167.0	100	8.05	7.95	145	177	< 20	< 10	—
WQ0014	1999-04-13	—	—	390	420	280.0	—	100	8.13	—	165	201	< 20	< 10	—
WQ0014	1999-05-03	682	—	460	110	87.0	105.0	80	8.32	8.15	183	220	< 20	< 10	—
WQ0014	1999-06-01	881	—	610	220	140.0	139.0	70	8.33	8.20	243	283	< 20	< 10	—
WQ0014	2000 No Flow														
WQ0014	2001-04-11	—	—	337	662	195.0	—	50	7.79	—	154	188	< 0.5	< 0.5	—
WQ0014	2001-05-07	—	—	460	268	135.0	—	50	7.82	—	195	238	< 0.5	< 0.5	—
WQ0014	2001-07-04	—	—	652	45	26.0	—	40	8.27	—	262	311	4.5	< 0.5	—
Whitemud River															
WQ0197	1973-05-24	—	440	410	30	—	—	—	8.43	—	249	267	18.0	0.0	—
WQ0197	1973-07-26	—	490	455	35	—	—	—	8.22	—	215	262	0.0	0.0	—
WQ0197	1973-10-04	—	450	410	40	—	—	—	8.39	—	244	266	15.4	0.0	—
WQ0197	1974-01-22	—	620	605	15	—	—	15	8.42	—	422	435	39.0	0.0	—
WQ0197	1974-01-31	—	600	600	< 5	—	—	—	—	—	—	—	—	—	—
WQ0197	1974-04-22	—	370	220	150	80.0	—	70	7.72	—	110	134	0.0	0.0	—
WQ0197	1974-08-26	—	400	375	25	15.0	—	30	8.22	—	200	244	0.0	0.0	—
WQ0197	1974-10-16	—	510	490	20	4.0	—	30	8.01	—	258	315	0.0	0.0	85.0
WQ0197	1975-02-11	—	560	560	< 5	3.0	—	18	7.40	—	382	466	0.0	0.0	108.0
WQ0197	1975-06-03	—	490	440	50	15.0	—	25	8.20	—	254	310	0.0	0.0	75.0
WQ0197	1975-09-03	—	464	377	87	35.0	—	40	8.30	—	222	271	0.0	0.0	70.0
WQ0197	1975-11-24	—	438	438	< 5	5.0	—	45	8.00	—	282	344	0.0	0.0	77.5
WQ0197	1976-02-11	—	618	611	7	3.0	—	42	7.90	—	420	512	0.0	0.0	125.0
WQ0197	1976-04-29	—	276	262	14	4.5	—	40	8.10	—	158	193	0.0	0.0	50.0
WQ0197	1976-07-05	—	466	411	55	25.0	—	45	8.20	—	255	311	0.0	0.0	67.5
WQ0197	1976-09-14	—	474	431	43	25.0	—	30	8.45	—	231	272	4.8	0.0	60.0
WQ0197	1977-01-05	—	800	800	< 5	4.0	—	10	7.55	—	508	620	0.0	0.0	125.0
WQ0197	1977-04-28	—	348	304	44	9.0	—	15	8.30	—	244	298	0.0	0.0	70.0
WQ0197	1977-07-14	—	450	297	153	80.0	—	30	8.15	—	182	222	0.0	0.0	57.5
WQ0197	1977-10-12	—	446	435	11	6.5	—	20	8.40	—	306	354	9.6	0.0	81.0
WQ0197	1978-01-24	—	—	—	10	—	—	—	7.55	7.30	—	—	—	—	—
WQ0197	1978-02-14	800	—	—	20	—	—	—	7.60	7.65	—	—	—	—	—
WQ0197	1978-03-29	550	—	—	12	—	—	—	7.60	7.65	—	—	—	—	—
WQ0197	1978-04-18	480	—	—	159	—	—	—	8.30	8.00	—	—	—	—	—
WQ0197	1978-05-16	600	—	—	17	—	—	—	8.40	8.15	—	—	—	—	—
WQ0197	1978-06-20	700	—	—	58	—	—	—	8.20	8.20	—	—	—	—	—
WQ0197	1978-07-25	500	—	—	32	—	—	—	8.35	8.05	—	—	—	—	—
WQ0197	1978-08-24	650	—	—	12	—	—	—	8.40	8.55	—	—	—	—	—
WQ0197	1978-09-21	550	—	—	38	—	—	—	8.30	8.25	—	—	—	—	—
WQ0197	1978-10-16	600	—	—	15	—	—	—	8.30	8.25	—	—	—	—	—
WQ0197	1978-11-09	600	—	—	9	—	—	—	8.15	8.35	—	—	—	—	—
WQ0197	1978-12-12	800	—	—	10	—	—	—	7.60	7.65	—	—	—	—	—
WQ0197	1979-01-18	800	—	—	8	—	—	—	7.25	7.40	—	—	—	—	—
WQ0197	1979-02-15	820	—	—	5	—	—	—	7.40	6.95	—	—	—	—	—
WQ0197	1979-03-15	750	—	—	< 5	—	—	—	7.35	6.95	—	—	—	—	—
WQ0197	1979-04-25	250	—	—	88	—	—	—	7.90	7.80	—	—	—	—	—
WQ0197	1979-04-30	330	—	—	94	—	—	—	7.90	—	—	—	—	—	—
WQ0197	1979-05-17	410	—	—	31	—	—	—	8.10	8.00	—	—	—	—	—
WQ0197	1979-06-20	700	—	—	39	—	—	—	7.95	7.10	—	—	—	—	—
WQ0197	1979-07-19	650	—	—	23	—	—	—	8.00	7.70	—	—	—	—	—
WQ0197	1979-08-22	583	—	—	21	—	—	—	8.20	8.10	—	—	—	—	—
WQ0197	1979-09-24	596	—	—	13	—	—	—	8.50	7.65	—	—	—	—	—
WQ0197	1979-10-16	623	—	—	11	—	—	—	8.00	8.35	—	—	—	—	—
WQ0197	1979-11-08	586	—	—	5	—	—	—	7.70	8.15	—	—	—	—	—
WQ0197	1979-12-03	785	—	—	< 5	—	—	—	8.19	8.25	—	—	—	—	—
WQ0197	1980-01-15	861	—	—	7	—	—	—	7.35	7.70	—	—	—	—	—
WQ0197	1980-02-18	850	—	—	< 5	—	—	—	7.30	7.30	—	—	—	—	—
WQ0197	1980-03-20	750	—	—	< 5	—	—	—	7.50	—	—	—	—	—	—
WQ0197	1980-04-09	450	320	280	44	20.0	—	40	8.00	7.70	—	—	—	—	—
WQ0197	1980-04-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Appendix 6. (Continued).

Site	Sample Date	Specific Conductivity Field uS/cm	Total Solids mg/L	Total Dissolved Solids mg/L	Total Suspended Solids mg/L	Turbidity Laboratory NTU	Turbidity Field NTU	True Colour Colour Units	pH Laboratory pH Units	pH Field pH Units	Total Alkalinity mg/L	Bicarbonate Alkalinity mg/L	Carbonate Alkalinity mg/L	Hydroxide Alkalinity mg/L	Calcium Extractable mg/L
WQ0197	1980-05-08	500	—	—	11	—	—	—	8.40	8.25	—	—	—	—	—
WQ0197	1980-06-17	750	—	—	77	—	—	—	8.35	8.45	—	—	—	—	—
WQ0197	1980-07-17	650	—	—	30	—	—	—	8.30	8.20	—	—	—	—	—
WQ0197	1980-08-14	550	—	—	24	—	—	—	8.20	7.95	—	—	—	—	—
WQ0197	1980-09-10	550	—	—	24	—	—	—	8.30	7.75	—	—	—	—	—
WQ0197	1980-10-21	600	—	—	20	—	—	—	8.30	8.25	—	—	—	—	—
WQ0197	1980-11-12	600	—	—	11	—	—	—	8.00	7.35	—	—	—	—	—
WQ0197	1980-12-18	950	—	—	< 5	—	—	—	7.65	7.79	—	—	—	—	—
WQ0197	1981-01-07	1060	—	—	< 5	—	—	—	7.50	7.55	—	—	—	—	—
WQ0197	1981-02-12	1038	—	—	8	—	—	—	7.30	7.33	—	—	—	—	—
WQ0197	1981-03-12	581	—	—	11	—	—	—	7.50	7.87	—	—	—	—	—
WQ0197	1981-04-15	459	—	—	118	6.0	—	—	8.40	8.42	—	—	—	—	—
WQ0197	1981-05-21	655	—	—	17	10.0	—	18	8.40	8.34	—	—	—	—	—
WQ0197	1981-06-17	586	—	—	116	75.0	—	—	8.20	8.25	—	—	—	—	—
WQ0197	1981-07-15	632	—	—	74	—	—	—	8.45	8.35	—	—	—	—	—
WQ0197	1981-08-20	606	—	—	26	25.0	—	—	8.45	8.41	—	—	—	—	—
WQ0197	1981-09-16	522	—	—	31	20.0	—	—	8.35	8.46	—	—	—	—	—
WQ0197	1981-10-21	522	—	—	12	7.0	—	—	8.30	8.34	—	—	—	—	—
WQ0197	1981-11-18	594.7	—	—	5	3.5	—	—	8.40	8.48	—	—	—	—	—
WQ0197	1981-12-09	785	—	—	< 5	6.5	—	—	8.20	8.41	—	—	—	—	—
WQ0197	1982-01-20	1253	—	—	6	3.0	—	—	7.40	6.90	—	—	—	—	—
WQ0197	1982-02-22	1041.4	—	—	35	15.0	—	—	7.40	6.85	—	—	—	—	—
WQ0197	1982-03-18	708	—	—	17	8.5	—	—	7.50	7.45	—	—	—	—	—
WQ0197	1982-04-27	434	—	—	43	20.0	—	—	8.10	7.50	—	—	—	—	—
WQ0197	1982-05-18	579	—	—	29	7.0	—	—	8.25	7.86	—	—	—	—	—
WQ0197	1982-06-14	585	—	—	< 5	10.0	—	—	8.45	8.20	—	—	—	—	—
WQ0197	1982-07-19	578	—	—	49	35.0	—	—	8.35	7.84	—	—	—	—	—
WQ0197	1982-08-25	594	—	—	23	15.0	—	—	8.60	8.37	—	—	—	—	—
WQ0197	1982-09-20	660	—	—	10	9.0	—	—	8.45	8.08	—	—	—	—	—
WQ0197	1982-10-06	680	—	—	8	6.5	—	—	8.30	7.79	—	—	—	—	—
WQ0197	1982-11-08	605	—	—	8	4.0	—	—	8.40	7.51	—	—	—	—	—
WQ0197	1982-12-14	974	—	—	7	6.0	—	—	7.65	7.47	—	—	—	—	—
WQ0197	1983-01-25	918	—	—	6	6.5	—	—	7.30	6.93	—	—	—	—	—
WQ0197	1983-03-03	883	—	—	< 5	2.5	—	—	7.35	—	—	—	—	—	—
WQ0197	1983-03-28	750	—	—	20	3.0	—	—	7.50	6.91	—	—	—	—	—
WQ0197	1983-04-27	312	—	—	170	150.0	—	—	7.80	7.43	—	—	—	—	—
WQ0197	1983-05-16	489	—	—	16	8.0	—	—	8.10	7.11	—	—	—	—	—
WQ0197	1983-06-29	689	—	—	28	15.0	—	—	8.30	7.84	—	—	—	—	—
WQ0197	1983-07-20	425	—	—	44	20.0	—	—	8.20	7.62	—	—	—	—	—
WQ0197	1983-09-06	649	—	—	23	15.0	—	—	8.35	8.29	—	—	—	—	—
WQ0197	1983-09-26	595	—	—	12	9.0	—	—	8.45	8.37	—	—	—	—	—
WQ0197	1983-10-24	554	—	—	8	5.5	—	—	8.30	9.46	—	—	—	—	—
WQ0197	1983-11-15	508	—	—	5	2.0	—	—	8.15	8.62	—	—	—	—	—
WQ0197	1983-12-06	—	—	—	< 5	1.5	—	—	7.95	6.80	—	—	—	—	—
WQ0197	1984-01-18	1059	—	—	< 5	20.0	—	—	7.35	6.95	—	—	—	—	—
WQ0197	1986-10-14	—	452	440	12	5.6	—	—	8.30	—	—	—	—	—	—
WQ0197	1986-11-25	840	588	560	28	18.0	23.0	—	7.70	7.85	—	—	—	—	—
WQ0197	1987-01-12	—	490	480	10	0.9	—	—	7.35	—	—	—	—	—	—
WQ0197	1987-02-17	—	535	530	5	3.6	7.5	—	—	7.70	—	—	—	—	—
WQ0197	1987-03-31	428	314	290	24	7.4	26.0	—	7.70	7.90	—	—	—	—	—
WQ0197	1987-05-12	590	246	230	16	5.5	23.0	—	—	8.13	—	—	—	—	—
WQ0197	1987-06-22	650	457	420	37	24.0	43.0	—	—	7.75	—	—	—	—	—
WQ0197	1987-07-29	585	449	440	9	0.6	18.0	—	8.45	8.30	—	—	—	—	—
WQ0197	1987-09-03	608	433	420	13	11.0	15.0	—	—	8.35	—	—	—	—	—
WQ0197	1987-10-22	588	437	430	7	3.5	4.3	—	8.15	8.60	—	—	—	—	—
WQ0197	1987-12-02	802	567	560	7	5.8	8.4	—	8.10	8.50	—	—	—	—	—
WQ0197	1988-01-11	1076	< 695	690	< 5	3.0	4.6	—	7.45	7.60	—	—	—	—	—
WQ0197	1988-03-01	1220	816	810	6	14.0	7.7	—	7.45	7.55	—	—	—	—	—
WQ0197	1988-04-13	361	266	240	26	19.0	30.0	—	8.00	8.30	—	—	—	—	—
WQ0197	1988-05-24	627	417	410	7	3.1	5.0	—	8.15	8.15	—	—	—	—	—
WQ0197	1988-06-21	663	426	410	16	4.8	23.0	—	8.40	8.40	—	—	—	—	—
WQ0197	1988-08-16	656	< 415	410	< 5	2.3	9.0	—	8.65	8.50	—	—	—	—	—
WQ0197	1988-09-28	881	537	530	7	2.5	11.0	—	8.35	8.45	—	—	—	—	—
WQ0197	1988-11-07	721	< 445	440	< 5	0.5	3.0	—	8.30	8.40	—	—	—	—	—
WQ0197	1988-12-12	1021	< 605	600	< 5	0.6	3.8	—	7.75	7.85	—	—	—	—	—
WQ0197	1989-02-06	1103	< 635	630	< 5	1.6	2.9	—	7.40	7.50	—	—	—	—	—
WQ0197	1989-03-06	1001	< 615	610	< 5	3.8	5.7	—	7.30	7.55	—	—	—	—	—
WQ0197	1989-05-01	491	354	330	24	17.0	21.0	—	8.18	8.40	—	—	—	—	—
WQ0197	1989-06-05	613	397	390	7	3.2	8.2	—	—	8.35	—	—	—	—	—
WQ0197	1989-08-01	607	422	410	12	9.5	21.0	—	8.42	8.50	—	—	—	—	—
WQ0197	1989-09-05	599	373	360	13	5.9	23.0	—	8.10	8.35	—	—	—	—	—
WQ0197	1989-11-06	635	415	410	5	1.1	4.5	—	8.28	8.50	—	—	—	—	—
WQ0197	1989-12-11	885	568	580	8	3.0	4.3	—	7.64	7.70	—	—	—	—	—
WQ0197	1990-02-06	786	< 615	610	< 5	2.9	3.5	—	7.25	7.25	—	—	—	—	—
WQ0197	1990-03-05	877	< 535	530	< 5	1.0	3.4	—	7.34	7.25	—	—	—	—	—
WQ0197	1990-05-07	572	370	360	13	3.0	12.0	—	8.12	8.05	—	—	—	—	—
WQ0197	1990-06-04	681	450	440	8	2.6	6.3	—	8.24	8.25	—	—	—	—	—
WQ0197	1990-08-07	650	420	400	21	12.0	22.0	—	8.47	8.50	—	—	—	—	—
WQ0197	1990-09-04	622	390	380	13	6.7	13.0	—	8.39	8.35	—	—	—	—	—
WQ0197	1990-11-05	748	480	470	7	0.7	3.2	—	8.29	8.20	—	—	—	—	—
WQ0197	1990-12-03	852	510	510	< 5	0.9	3.6	—	7.90	7.80	—	—	—	—	—
WQ0197	1991-02-04	944	580	580	5	2.7	4.9	—	7.24	7.15	—	—	—	—	—
WQ0197	1991-03-04	863	510	510	< 5	2.4	3.5	—	7.29	7.35	—	—	—	—	—
WQ0197	1991-05-06	626	380	370	10	5.3	9.5	—	8.35	8.25	—	—	—	—	—
WQ0197	1991-06-03	672	430	410	19	13.0	14.0	—	8.19	8.20	—	—	—	—	—
WQ0197	1991-08-06	642	420	410	14	9.6	16.0	—	8.41	8.40	—	—	—	—	—
WQ0197	1991-09-09	711	440	430	14	12.0	14.0	—	8.35	8.35	—	—	—	—	—
WQ0197	1992-06-24	657	430	430	< 5	2.6	9.7	> 50	8.06	8.05	256	312	< 0.60	< 0.34	70.9
WQ0197	1992-09-30	—	400	400	5	3.8	16.0	30	8.10	8.15	272	332	< 0.60	< 0.34	72.4
WQ0197	1993-01-04	902	540	540	< 5	2.1	5.3	10	7.42	7.40	390	478	< 0.60	< 0.34	93.0
WQ0197	1993-04-15	441	300	270	27	14.0	20.0	15	8.18	8.10	201	245	< 0.60	< 0.34	53.2
WQ0197	1993-06-23	641	420	420	< 5	4.3	12.0	20	8.11	8.30	284	347	< 0.60	< 0.34	70.6
WQ0197	1993-09-29	668	440	440	< 5	0.2	4.2	< 50	8.09	8.00	261	319	< 0.60	< 0.34	65.4
WQ0197	1994-01-04	1131	750	740	7	7.5	5.8	20	7.43	7.45	479	585	< 0.60	< 0.34	121.0
WQ0197	1994-04-05	—	340	340	< 5	2.6	3.6	35	7.89	7.65	238	287	< 18.0	< 10.2	65.6
WQ0197	1994-07-04	612	380	380	< 5	9.1	17.0	20	8.19	8.15	273	333	< 18.0	< 10.2	67.8
WQ0197	1994-10-03	658	400	390	8	5.5	6.8	20	8.24	8.15	284	348	< 18.0	< 10.2	67.7
WQ0197	1995-01-03	900	540	540	< 5	1.7	6.3	10	7.50	7.50	399	487	< 18.0	< 10.2	103.0
WQ0197	1995-04-04	408	310	310	43	26.0	30.0	> 50	7.78	7.75	172	210	< 18.0	< 10.2	48.6
WQ0197	1995-07-04	647	440	420	24	14.0	22.5	> 50	7.81	8.30	247	301	< 18.0	< 10.2	75.0
WQ0197	1995-10-03	667	550	550	< 5	6.8	10.0	30	8.27	8.25	271	330	< 18.0	< 10.2	71.8
WQ0197	1996-01-02	801	500	500	5	7.6	6.2	15	7.50	7.50	357	436	< 18.0	< 10.2	99.3
WQ0197	1996-04-01	800	480	480	< 5	4.4	5.3	25	7.59	7.55	374	457	< 18.0	< 10.2	90.1
WQ0197	1996-05-13	—	—	300	10	6.4	—	—	8.14	—	—	—	—	—	—
WQ0197	1996-06-10	—	—	420	24	18.0	—	—	8.13	—	—	—	—	—	—
WQ0197	1996-07-08	646	460	440	17	16.0	17.1	> 50	8.12	7.50	280	318	< 18.0	< 10.2	66.1

Appendix 6. (Continued).

Site	Sample Date	Specific Conductivity Field uS/cm	Total Solids mg/L	Total Dissolved Solids mg/L	Total Suspended Solids mg/L	Turbidity Laboratory NTU	Turbidity Field NTU	True Colour Colour Units	pH Laboratory pH Units	pH Field pH Units	Total Alkalinity mg/L	Bicarbonate Alkalinity mg/L	Carbonate Alkalinity mg/L	Hydroxide Alkalinity mg/L	Calcium Extractable mg/L
WQ0197	1996-07-15	—	—	440	12	11.0	—	—	8.28	—	—	—	—	—	—
WQ0197	1996-08-12	—	—	400	< 5	5.5	—	—	8.12	—	—	—	—	—	—
WQ0197	1996-09-29	688	420	420	< 5	3.8	6.7	40	8.40	8.30	260	290	< 18.0	< 10.2	65.5
WQ0197	1997-01-06	889	550	550	< 5	2.5	11.5	15	7.38	7.55	380	464	< 18	< 10.2	98.6
WQ0197	1997-04-09	517	350	340	7	11.0	15.3	60	7.77	7.80	223	272	< 20	< 10	63.9
WQ0197	1997-05-13	—	—	370	15	15.0	—	—	8.23	—	—	—	—	—	—
WQ0197	1997-06-10	—	—	500	18	15.0	—	—	8.25	—	—	—	—	—	—
WQ0197	1997-07-07	572	380	370	12	10.0	14.0	30	8.37	8.40	269	302	< 20	< 10	71.4
WQ0197	1997-07-15	—	—	500	23	16.0	—	—	8.26	—	—	—	—	—	—
WQ0197	1997-08-19	—	—	470	11	11.0	—	—	8.22	—	—	—	—	—	—
WQ0197	1997-10-06	695	550	540	12	8.7	11.0	30	8.24	8.20	267	326	< 20	< 10	69.2
WQ0197	1998-01-05	887	550	550	< 5	3.7	835.0	15	7.64	7.70	389	474	< 20	< 10	94.9
WQ0197	1998-04-07	385	310	190	130	73.0	92.0	60	7.93	7.85	149	181	< 20	< 10	50.2
WQ0197	1998-05-20	—	—	460	34	20.0	—	—	8.38	—	—	—	—	—	—
WQ0197	1998-06-25	—	—	530	79	45.0	—	—	8.12	—	—	—	—	—	—
WQ0197	1998-07-06	760	570	540	26	20.0	24.0	50	8.21	8.20	292	356	< 20	< 10	—
WQ0197	1998-07-29	—	—	550	88	61.0	—	—	8.51	—	—	—	—	—	—
WQ0197	1998-08-20	—	—	460	120	60.0	—	—	8.49	—	—	—	—	—	—
WQ0197	1998-10-04	664	440	440	< 5	4.4	5.2	40	8.29	8.30	267	326	< 20	< 10	—
WQ0197	1999-04-06	527	—	350	100	59.0	58.0	50	8.22	8.10	208	253	< 20	< 10	—
WQ0197	1999-05-20	—	—	630	120	76.0	—	—	8.10	—	—	—	—	—	—
WQ0197	1999-06-21	—	—	710	49	32.0	—	—	8.18	—	—	—	—	—	—
WQ0197	1999-07-07	837	—	590	18	7.6	10.0	60	8.22	8.15	291	355	< 20	< 10	—
WQ0197	1999-07-21	—	—	520	14	6.5	—	—	8.51	—	—	—	—	—	—
WQ0197	1999-08-24	—	—	500	58	31.0	—	—	8.13	—	—	—	—	—	—
WQ0197	1999-10-04	660	—	410	< 5	5.3	6.1	50	8.20	8.20	249	303	< 20	< 10	—
WQ0197	2000-01-10	1002	—	630	14	8.9	8.5	25	7.56	7.55	397	485	< 20	< 10	—
WQ0197	2000-04-03	—	—	360	44	33.0	35.0	50	8.08	8.10	181	221	< 20	< 10	—
WQ0197	2000-05-15	—	—	440	14	11.0	—	—	8.23	—	—	—	—	—	—
WQ0197	2000-06-19	—	—	400	48	26.0	—	—	8.30	—	—	—	—	—	—
WQ0197	2000-07-04	673	—	470	26	23.0	19.0	50	8.36	8.35	277	305	< 20	< 10	—
WQ0197	2000-07-18	—	—	550	29	31.0	—	—	8.20	—	—	—	—	—	—
WQ0197	2000-08-16	—	—	400	10	12.0	—	—	8.21	—	—	—	—	—	—
WQ0197	2000-10-02	655	—	450	8	7.4	6.1	50	8.25	8.40	248	302	< 20	< 10	—
WQ0197	2001-01-10	898	—	590	8	6.5	7.4	30	7.52	7.50	380	464	< 20	< 10	—
WQ0197	2001-04-10	—	—	248	101	43.0	—	50	7.70	—	159	194	< 0.5	< 0.5	—
WQ0197	2001-05-15	—	—	396	19	9.4	—	—	7.94	—	—	—	—	—	—
WQ0197	2001-06-12	—	—	481	—	23.0	—	—	8.04	—	—	—	—	—	—
WQ0197	2001-07-03	—	—	483	40	21.0	—	60	7.85	—	184	224	< 0.5	< 0.5	—
WQ0197	2001-07-16	—	—	484	27	17.0	—	—	7.89	—	—	—	—	—	—
WQ0197	2001-08-14	—	—	500	50	23.0	—	—	7.90	—	—	—	—	—	—
WQ0197	2001-10-01	—	—	476	7	3.5	—	37	8.17	—	273	334	< 0.5	< 0.5	—
Waterhen River															
WQ0561	1981-08-18	1404	—	—	21	5.0	—	—	8.80	8.83	—	—	—	—	—
WQ0561	1981-09-14	1451	—	—	9	5.0	—	—	8.92	8.93	—	—	—	—	—
WQ0561	1981-10-19	1460	—	—	24	15.0	—	—	8.30	8.49	—	—	—	—	—
WQ0561	1981-11-16	1626.8	—	—	< 5	7.0	—	—	8.20	8.47	—	—	—	—	—
WQ0561	1981-12-07	1765	—	—	< 5	2.5	—	—	8.15	7.54	—	—	—	—	—
WQ0561	1982-01-25	3177	—	—	13	2.0	—	—	7.70	8.56	—	—	—	—	—
WQ0561	1982-02-23	5310.9	—	—	< 5	1.5	—	—	7.50	7.43	—	—	—	—	—
WQ0561	1982-03-22	6795	—	—	5	3.0	—	—	7.35	7.07	—	—	—	—	—
WQ0561	1982-05-26	1474	—	—	< 5	3.0	—	—	8.45	8.03	—	—	—	—	—
WQ0561	1982-07-14	1456	—	—	11	6.0	—	—	8.60	8.24	—	—	—	—	—
WQ0561	1982-08-31	1267	—	—	12	5.0	—	—	8.90	7.90	—	—	—	—	—
WQ0561	1982-09-30	1545	—	—	< 5	4.0	—	—	8.50	9.22	—	—	—	—	—
WQ0561	1982-10-28	1513	—	—	10	4.0	—	—	8.45	7.72	—	—	—	—	—
WQ0561	1982-11-24	1942	—	—	14	2.0	—	—	8.15	6.14	—	—	—	—	—
WQ0561	1982-12-29	1147	—	—	< 5	1.0	—	—	7.70	7.33	—	—	—	—	—
WQ0561	1983-05-25	1230	—	—	20	4.5	—	—	8.40	7.18	—	—	—	—	—
WQ0561	1983-06-22	1242	—	—	< 5	2.5	—	—	8.35	7.18	—	—	—	—	—
WQ0561	1983-08-04	1272	—	—	9	2.0	—	—	8.60	8.57	—	—	—	—	—
WQ0561	1983-08-31	1272	—	—	10	2.5	—	—	8.75	8.57	—	—	—	—	—
WQ0561	1983-10-04	1350	—	—	5	2.5	—	—	8.50	8.48	—	—	—	—	—
WQ0561	1983-11-02	1270	—	—	9	3.0	—	—	8.45	8.26	—	—	—	—	—
WQ0561	1983-11-30	1924	—	—	11	2.5	—	—	8.10	—	—	—	—	—	—
WQ0561	1983-12-20	—	—	—	< 5	1.0	—	—	7.90	—	—	—	—	—	—
WQ0561	1984-02-14	1853	—	—	6	1.0	—	—	7.40	7.12	—	—	—	—	—
WQ0561	1984-03-20	—	—	—	< 5	1.0	—	—	7.55	7.45	—	—	—	—	—
WQ0561	1987-07-08	1274	861	850	11	2.7	7.5	< 5	8.60	8.65	130	139	9.6	0.0	36.6
WQ0561	1987-11-04	1427	805	790	15	11.0	20.0	10	8.20	8.50	156	190	0.0	0.0	47.8
WQ0561	1988-05-04	1222	< 655	650	< 5	3.4	4.8	10	8.20	8.35	134	163	0.0	0.0	41.7
WQ0561	1988-07-04	1313	< 745	740	< 5	2.8	4.0	5	8.60	8.70	140	156	7.2	0.0	39.9
WQ0561	1988-10-03	1414	796	780	16	7.6	20.0	< 5	8.40	8.60	148	176	2.4	0.0	45.1
WQ0561	1989-04-10	2072	< 1145	1140	< 5	0.3	2.1	< 15	7.60	7.80	242	295.2	0.0	0.0	76.0
WQ0561	1989-07-10	1387	840	830	8	0.8	3.5	5	8.63	8.80	129	119	19.1	0.0	36.5
WQ0561	1989-10-10	1457	860	850	8	4.3	6.9	5	—	8.50	141	172	0.0	0.0	41.9
WQ0561	1990-04-09	2110	1220	1220	< 5	0.7	3.1	> 50	7.44	7.60	238	290	0.0	0.0	75.0
WQ0561	1990-06-25	1311	920	920	5	1.6	2.8	15	8.14	8.35	144	176	0.0	0.0	41.3
WQ0561	1990-10-09	1409	800	790	6	4.8	4.5	5	8.49	8.40	142	140	16.8	0.0	38.8
WQ0561	1991-04-15	1437	830	830	5	1.4	2.6	10	7.66	7.70	190	232	0.0	0.0	54.3
WQ0561	1991-06-24	1388	810	800	8	3.7	3.5	5	8.52	8.65	134	148	7.8	0.0	37.0
WQ0561	1991-09-30	1506	830	820	11	8.2	10.0	5	8.30	8.45	142	155	8.9	0.0	28.0
WQ0561	1992-04-13	2187	1300	1300	< 5	1.4	8.5	10	7.55	7.55	267	325	< 0.60	< 0.34	72.0
WQ0561	1992-06-22	1277	740	740	< 5	1.5	3.1	< 5	8.35	8.25	143	151	11.4	< 0.34	42.9
WQ0561	1992-09-28	1393	790	780	14	2.6	8.5	5	8.29	8.30	140	171	< 0.60	< 0.34	42.6
WQ0561	1993-04-13	1576	920	910	11	3.1	4.2	5	7.99	7.90	200	243	< 0.60	< 0.34	62.4
WQ0561	1993-06-21	1421	790	790	< 5	1.2	2.5	5	8.45	8.55	139	154	7.9	< 0.34	41.7
WQ0561	1993-09-27	1412	800	790	7	5.3	8.4	5	8.39	8.35	141	158	6.5	< 0.34	42.2
WQ0561	1994-04-11	2005	1200	1200	< 5	1.2	2.5	5	7.52	7.60	235	267	< 0.60	< 0.34	69.4
WQ0561	1994-06-27	—	810	810	< 5	1.6	5.0	5	8.47	8.40	144	161	< 18.0	< 10.2	41.6
WQ0561	1994-08-29	—	840	840	< 5	3.1	—	10	8.95	—	121	101	22.7	< 10.2	31.1
WQ0561	1994-09-26	1434	880	880	7	2.3	4.3	5	8.53	—	137	133	< 18.0	< 10.2	36.2
WQ0561	1995-04-18	1618	900	900	< 5	2.4	4.5	5	7.89	7.60	187	228	< 18.0	< 10.2	53.4
WQ0561	1995-07-24	—	700	700	< 5	2.4	—	5	9.00	—	113	85.9	25.6	< 10.2	27.0
WQ0561	1995-08-23	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1995-10-10	—	760	760	< 5	3.1	—	10	8.60	—	150	135	23.9	< 10.2	41.9
WQ0561	1996-05-13	1238	690	680	7	1.1	3.8	< 5	8.08	8.10	166	203	< 18.0	< 10.2	48.6
WQ0561	1996-06-24	1207	690	680	8	4.9	3.5	10	8.13	7.80	169	206	< 18.0	< 10.2	47.9
WQ0561	1996-09-30	1265	710	700	< 5	3.5	4.5	15	8.51	8.40	146	158	< 18.0	< 10.2	40.8
WQ0561	1997-04-22	1410	780	780	< 5	1.1	2.3	15	7.74	7.75	170	208	< 20	< 10	53.8
WQ0561	1997-06-26	—	750	750	5	1.6	—	15	8.06	—	153	187	< 20	< 10	46.6
WQ0561	1997-10-21	1429	780	770	6	4.0	5.8	15	8.19	8.15	155	189	< 20	< 10	42.9
WQ0561	1998-04-27	1528	960	950	< 5	2.0	2.0	5	8.22	—	167	204	< 20	< 10	50.6
WQ0561	1998-07-06	1342	850	850	8	2.2	3.8	10	8.44	8.25	135	146	< 20	< 10	—
WQ0561	1998-10-14	1402	810	800	13	6.5	7.8	15	8.29	8.30	148	181	< 20	< 10	—
WQ0561	1999-04-19	1366	—	740	5	1.8	4.0	50	8.27	8.25	156	190	< 20	< 10	—

Appendix 6. (Continued).

Site	Sample Date	Specific Conductivity Field uS/cm	Total Solids mg/L	Total Dissolved Solids mg/L	Total Suspended Solids mg/L	Turbidity Laboratory NTU	Turbidity Field NTU	True Colour Colour Units	pH Laboratory pH Units	pH Field pH Units	Total Alkalinity mg/L	Bicarbonate Alkalinity mg/L	Carbonate Alkalinity mg/L	Hydroxide Alkalinity mg/L	Calcium Extractable mg/L
WQ0561	1999-07-06	1303	---	750	5	2.2	3.7	15	8.54	8.45	143	148	< 20	< 10	---
WQ0561	1999-09-20	1353	---	720	< 5	4.2	5.2	10	8.57	8.70	145	148	< 20	< 10	---
WQ0561	2000-04-18	1448	---	830	8	4.2	6.5	5	8.31	8.30	166	190	< 20	< 10	---
WQ0561	2000-06-27	1366	---	740	< 5	2.7	4.1	10	8.42	8.15	138	132	< 20	< 10	---
WQ0561	2000-10-04	1432	---	760	5	4.9	5.1	10	8.47	8.60	143	145	< 20	< 10	---
WQ0561	2001-04-22	---	---	862	2	0.8	---	10	7.35	---	213	260	< 0.5	< 0.5	---
WQ0561	2001-07-16	---	---	692	5	2.7	---	5	8.25	---	142	173	< 0.5	< 0.5	---
WQ0561	2001-09-25	---	---	705	5	2.4	---	5	8.44	---	128	145	5.4	< 0.5	---
Fairford River															
WQ0364	1978-01-16	---	---	---	6	---	---	---	8.10	7.95	---	---	---	---	---
WQ0364	1978-02-21	1700	---	---	< 5	---	---	---	8.00	7.95	---	---	---	---	---
WQ0364	1978-03-20	1650	---	---	< 5	---	---	---	7.95	7.65	---	---	---	---	---
WQ0364	1978-04-24	1600	---	---	< 5	---	---	---	7.90	7.50	---	---	---	---	---
WQ0364	1978-05-16	1350	---	---	< 5	---	---	---	8.30	7.80	---	---	---	---	---
WQ0364	1978-06-19	1300	---	---	18	---	---	---	8.60	8.45	---	---	---	---	---
WQ0364	1978-07-24	1350	---	---	18	---	---	---	8.60	8.25	---	---	---	---	---
WQ0364	1978-08-29	1400	---	---	14	---	---	---	8.50	8.35	---	---	---	---	---
WQ0364	1978-09-26	1400	---	---	21	---	---	---	8.50	8.35	---	---	---	---	---
WQ0364	1978-10-23	1350	---	---	26	---	---	---	8.40	---	---	---	---	---	---
WQ0364	1978-11-13	1400	---	---	16	---	---	---	8.30	8.50	---	---	---	---	---
WQ0364	1978-12-11	1600	---	---	10	---	---	---	8.20	7.65	---	---	---	---	---
WQ0364	1979-01-29	1750	---	---	< 5	---	---	---	8.20	7.70	---	---	---	---	---
WQ0364	1979-02-19	1750	---	---	< 5	---	---	---	8.10	7.50	---	---	---	---	---
WQ0364	1979-03-20	1800	---	---	< 5	---	---	---	8.00	7.75	---	---	---	---	---
WQ0364	1979-04-30	1600	---	---	8	---	---	---	7.80	7.65	---	---	---	---	---
WQ0364	1979-05-07	1600	---	---	36	---	---	---	8.00	7.65	---	---	---	---	---
WQ0364	1979-05-28	1000	---	---	< 5	---	---	---	7.90	7.35	---	---	---	---	---
WQ0364	1979-06-25	1400	---	---	22	---	---	---	8.20	8.20	---	---	---	---	---
WQ0364	1979-07-23	1400	---	---	18	---	---	---	8.50	8.15	---	---	---	---	---
WQ0364	1979-08-27	1368	---	---	21	---	---	---	8.45	7.75	---	---	---	---	---
WQ0364	1979-10-01	1335	---	---	20	---	---	---	8.60	7.55	---	---	---	---	---
WQ0364	1979-10-23	1397	---	---	24	---	---	---	8.30	8.55	---	---	---	---	---
WQ0364	1979-11-20	1690	---	---	16	---	---	---	8.25	8.00	---	---	---	---	---
WQ0364	1979-12-13	1323	---	---	< 5	---	---	---	8.30	8.60	---	---	---	---	---
WQ0364	1980-01-07	1279	---	---	< 5	---	---	---	8.10	8.35	---	---	---	---	---
WQ0364	1980-02-04	1650	---	---	< 5	---	---	---	8.10	8.65	---	---	---	---	---
WQ0364	1980-03-11	1500	---	---	< 5	---	---	---	7.90	7.35	---	---	---	---	---
WQ0364	1980-04-17	1500	---	---	5	---	---	---	8.10	7.40	---	---	---	---	---
WQ0364	1980-05-05	1300	---	---	< 5	---	---	---	8.40	7.15	---	---	---	---	---
WQ0364	1980-06-23	1450	---	---	13	---	---	---	8.60	8.60	---	---	---	---	---
WQ0364	1980-07-21	1500	---	---	9	---	---	---	8.60	8.70	---	---	---	---	---
WQ0364	1980-08-18	1500	---	---	13	---	---	---	8.60	8.45	---	---	---	---	---
WQ0364	1980-09-15	1500	---	---	64	---	---	---	8.60	8.25	---	---	---	---	---
WQ0364	1980-10-21	1450	---	---	11	---	---	---	8.40	8.25	---	---	---	---	---
WQ0364	1980-11-25	1550	---	---	18	---	---	---	8.30	7.70	---	---	---	---	---
WQ0364	1980-12-15	1500	---	---	< 5	---	---	---	8.30	7.58	---	---	---	---	---
WQ0364	1981-01-05	1527	---	---	< 5	---	---	---	8.20	8.44	---	---	---	---	---
WQ0364	1981-02-10	1700	---	---	< 5	---	---	---	8.10	8.29	---	---	---	---	---
WQ0364	1981-03-10	1693	---	---	< 5	---	---	---	8.00	8.20	---	---	---	---	---
WQ0364	1981-04-13	1518	---	---	19	1.0	---	---	8.20	8.40	---	---	---	---	---
WQ0364	1981-05-19	1853	---	---	9	3.5	---	---	8.35	8.47	---	---	---	---	---
WQ0364	1981-06-15	1373	---	---	< 5	5.5	---	---	8.50	8.55	---	---	---	---	---
WQ0364	1981-07-13	1408	---	---	21	10.0	---	---	8.60	8.66	---	---	---	---	---
WQ0364	1981-08-18	1437	---	---	25	8.0	---	---	8.60	8.60	---	---	---	---	---
WQ0364	1981-09-14	1422	---	---	28	15.0	---	---	8.60	8.65	---	---	---	---	---
WQ0364	1981-10-19	1492	---	---	49	30.0	---	---	8.32	8.56	---	---	---	---	---
WQ0364	1981-11-16	1506.6	---	---	15	15.0	---	---	8.30	8.45	---	---	---	---	---
WQ0364	1981-12-07	900	---	---	5	5.0	---	---	8.30	6.33	---	---	---	---	---
WQ0364	1982-01-25	1700	---	---	< 5	2.5	---	---	8.40	7.98	---	---	---	---	---
WQ0364	1982-02-23	1708.5	---	---	< 5	2.0	---	---	8.30	7.34	---	---	---	---	---
WQ0364	1982-03-22	1843	---	---	< 5	1.0	---	---	8.25	6.82	---	---	---	---	---
WQ0364	1982-04-20	1545	---	---	7	2.0	---	---	8.30	8.45	---	---	---	---	---
WQ0364	1982-05-27	1480	---	---	19	3.0	---	---	8.50	7.95	---	---	---	---	---
WQ0364	1982-07-15	1545	---	---	17	7.5	---	---	8.65	7.74	---	---	---	---	---
WQ0364	1982-08-31	1317	---	---	22	10.0	---	---	8.60	7.50	---	---	---	---	---
WQ0364	1982-09-28	1519	---	---	17	10.0	---	---	8.45	8.22	---	---	---	---	---
WQ0364	1982-10-20	1642	---	---	16	7.5	---	---	8.40	7.89	---	---	---	---	---
WQ0364	1982-11-24	1640	---	---	12	3.5	---	---	8.40	6.50	---	---	---	---	---
WQ0364	1982-12-29	1700	---	---	< 5	2.0	---	---	8.30	8.78	---	---	---	---	---
WQ0364	1983-02-22	1597	---	---	8	1.5	---	---	8.15	7.03	---	---	---	---	---
WQ0364	1983-03-24	1725	---	---	< 5	1.0	---	---	8.05	7.22	---	---	---	---	---
WQ0364	1983-04-18	---	---	---	< 5	1.5	---	---	8.05	---	---	---	---	---	---
WQ0364	1983-05-27	1217	---	---	12	4.5	---	---	8.35	7.57	---	---	---	---	---
WQ0364	1983-06-22	1492	---	---	20	9.0	---	---	8.60	6.93	---	---	---	---	---
WQ0364	1983-08-04	1480	---	---	21	9.5	---	---	8.60	8.74	---	---	---	---	---
WQ0364	1983-08-31	1480	---	---	21	6.5	---	---	8.60	8.74	---	---	---	---	---
WQ0364	1983-10-04	1499	---	---	11	5.5	---	---	8.50	8.40	---	---	---	---	---
WQ0364	1983-11-02	1444	---	---	18	10.0	---	---	8.45	8.40	---	---	---	---	---
WQ0364	1983-11-30	1465	---	---	5	3.0	---	---	8.25	---	---	---	---	---	---
WQ0364	1983-12-20	---	---	---	< 5	1.5	---	---	8.25	---	---	---	---	---	---
WQ0364	1984-02-14	1765	---	---	10	1.5	---	---	8.50	7.32	---	---	---	---	---
WQ0364	1984-03-20	---	---	---	< 5	1.0	---	---	8.10	7.28	---	---	---	---	---
WQ0364	1994-08-29	---	1100	1100	< 5	8.1	---	5	8.59	---	174	180	< 18.0	< 10.2	41.5

Appendix 6. (Continued).

Site	Sample Date	Calcium Total mg/L	Calcium Dissolved mg/L	Magnesium Extractable mg/L	Magnesium Total mg/L	Magnesium Dissolved mg/L	Hardness (CaCO3) mg/L	Manganese Extractable mg/L	Manganese Total mg/L	Manganese Dissolved mg/L	Iron Extractable mg/L	Iron Total mg/L	Iron Dissolved mg/L	Potassium Extractable mg/L	Potassium Total mg/L	Potassium Dissolved mg/L
Assiniboine Diversion est																
WQ0014	1971-04-22	—	—	—	—	—	200	—	—	—	—	—	—	—	—	—
WQ0014	1972-04-27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1972-05-24	—	—	—	—	—	230	—	—	—	—	—	—	10.0	—	—
WQ0014	1973 No Flow															
WQ0014	1974-04-05	—	—	—	—	—	430	—	—	—	—	—	—	—	—	—
WQ0014	1974-05-02	—	—	14.0	—	—	170	—	—	—	—	—	—	10.5	—	—
WQ0014	1974-06-04	—	—	32.0	—	—	293	—	—	—	—	—	—	13.0	—	—
WQ0014	1975-05-27	—	—	26.0	—	—	238	0.270	—	—	0.08	—	—	14.0	—	—
WQ0014	1976-05-04	—	—	31.0	—	—	283	0.290	—	—	3.80	—	—	13.0	—	—
WQ0014	1977 No Flow															
WQ0391	1978-04-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1979-04-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1979-04-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1979-05-17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1979-06-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1980 No Flow															
WQ0391	1981 No Flow															
WQ0391	1982-04-27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1983-04-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1983-05-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1984 No Flow															
WQ0014	No Spring Sampl															
WQ0014	1985-11-13	—	—	52.0	—	—	443	0.150	—	—	0.69	—	—	9.0	—	—
WQ0014	1986-04-09	—	—	22.6	—	—	216	0.390	—	—	4.67	—	—	8.0	—	—
WQ0014	May 86 No Flow															
WQ0014	1986-06-02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1987-04-06	—	—	32.1	—	—	345	1.100	—	—	6.77	—	—	8.5	—	—
WQ0014	1988 No Flow															
WQ0014	1989-04-04	—	—	29.9	—	—	304	0.230	—	—	2.73	—	—	6.5	—	—
WQ0014	1990 No Flow															
WQ0014	1991 No Flow															
WQ0014	1992-04-07	—	—	27.4	—	—	263	0.550	—	—	6.44	—	—	9.0	—	—
WQ0014	1992-05-04	—	—	31.9	—	—	282	0.130	—	—	0.96	—	—	9.0	—	—
WQ0014	1993 Aug. Flow															
WQ0014	1993-08-09	—	—	35.6	—	—	320	0.140	—	—	0.42	—	—	7.5	—	—
WQ0014	1994-07-05	—	—	44.0	—	—	350	0.270	—	—	0.72	—	—	12.6	—	—
WQ0014	1994-08-09	—	—	39.3	—	—	336	0.100	—	—	0.40	—	—	8.6	—	—
WQ0014	1994-09-06	—	—	34.9	—	—	308	0.110	—	—	0.69	—	—	7.8	—	—
WQ0014	1995-04-05	—	—	23.2	—	—	209	0.140	—	—	1.71	—	—	11.8	—	—
WQ0014	1995-05-01	—	—	23.5	—	—	234	0.420	—	—	3.62	—	—	11.0	—	—
WQ0014	1996-04-02	—	—	47.1	—	—	410	0.153	—	—	1.01	—	—	11.6	—	—
WQ0014	1996-05-06	—	—	28.5	—	—	—	0.299	—	—	1.59	—	—	12.7	—	—
WQ0014	1996-06-10	—	—	36.0	—	—	—	0.099	—	—	—	—	—	12.4	—	—
WQ0014	1997-04-10	—	—	22.2	—	—	212	0.107	—	—	0.59	—	—	12.3	—	—
WQ0014	1997-05-05	—	—	26.1	—	—	—	0.203	—	—	0.97	—	—	11.7	—	—
WQ0014	1998-04-08	66.4	34.0	25.3	28.9	15.5	265	0.876	0.985	0.005	6.39	25.20	0.04	9.9	14.2	9.20
WQ0014	1999-04-07	48.7	—	—	22.1	—	213	—	0.341	—	—	6.29	—	—	10.8	—
WQ0014	1999-04-13	64.3	—	—	32.1	—	293	—	0.522	—	—	13.30	—	—	15.0	—
WQ0014	1999-05-03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1999-06-01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	2000 No Flow															
WQ0014	2001-04-11	61.8	—	—	28.4	—	271	—	0.776	—	—	12.60	—	—	8.75	—
WQ0014	2001-05-07	60.3	—	—	31.8	—	—	—	0.280	—	—	4.70	—	—	12.00	—
WQ0014	2001-07-04	81.3	—	—	52.6	—	420	—	0.111	—	—	0.85	—	—	8.94	—
Whitemud River																
WQ0197	1973-05-24	—	—	—	—	—	—	—	—	—	—	—	—	5.5	—	—
WQ0197	1973-07-26	—	—	30.0	—	—	285	—	—	—	< 0.050	—	—	5.0	—	—
WQ0197	1973-10-04	—	—	—	—	—	335	—	—	—	—	—	—	6.5	—	—
WQ0197	1974-01-22	—	—	—	—	—	395	0.030	—	—	0.06	—	—	—	—	—
WQ0197	1974-01-31	—	—	—	—	—	410	0.030	—	—	—	—	—	—	—	—
WQ0197	1974-04-22	—	—	—	—	—	148	—	—	—	1.83	—	—	6.9	—	—
WQ0197	1974-08-26	—	—	33.0	—	—	295	0.050	—	—	0.15	—	—	6.8	—	—
WQ0197	1974-10-16	—	—	43.0	—	—	390	< 0.020	—	—	0.10	—	—	8.6	—	—
WQ0197	1975-02-11	—	—	51.0	—	—	479	0.040	—	—	0.14	—	—	6.2	—	—
WQ0197	1975-06-03	—	—	42.0	—	—	361	—	—	—	1.40	—	—	6.6	—	—
WQ0197	1975-09-03	—	—	30.0	—	—	298	0.150	—	—	0.72	—	—	5.6	—	—
WQ0197	1975-11-24	—	—	34.0	—	—	334	0.030	—	—	0.23	—	—	8.5	—	—
WQ0197	1976-02-11	—	—	48.0	—	—	510	0.350	—	—	0.31	—	—	16.0	—	—
WQ0197	1976-04-29	—	—	21.0	—	—	211	< 0.020	—	—	0.05	—	—	7.0	—	—
WQ0197	1976-07-05	—	—	38.0	—	—	325	0.070	—	—	0.44	—	—	8.5	—	—
WQ0197	1976-09-14	—	—	40.0	—	—	314	0.050	—	—	0.59	—	—	10.0	—	—
WQ0197	1977-01-05	—	—	64.0	—	—	576	0.540	—	—	0.22	—	—	13.0	—	—
WQ0197	1977-04-28	—	—	30.0	—	—	298	0.130	—	—	0.43	—	—	6.6	—	—
WQ0197	1977-07-14	—	—	26.0	—	—	251	0.210	—	—	0.97	—	—	5.4	—	—
WQ0197	1977-10-12	—	—	41.0	—	—	370	0.040	—	—	0.27	—	—	5.0	—	—
WQ0197	1978-01-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-02-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-03-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-04-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-05-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-06-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-07-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-08-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-09-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-10-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-11-09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-12-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-01-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-02-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-03-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-04-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-04-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-05-17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-06-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-07-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-08-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-09-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-10-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-11-08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-12-03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-01-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-02-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-03-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-04-09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-04-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Appendix 6. (Continued).

Site	Sample Date	Calcium Total mg/L	Calcium Dissolved mg/L	Magnesium Extractable mg/L	Magnesium Total mg/L	Magnesium Dissolved mg/L	Hardness (CaCO3) mg/L	Manganese Extractable mg/L	Manganese Total mg/L	Manganese Dissolved mg/L	Iron Extractable mg/L	Iron Total mg/L	Iron Dissolved mg/L	Potassium Extractable mg/L	Potassium Total mg/L	Potassium Dissolved mg/L
WQ0197	1980-05-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-06-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-07-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-08-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-09-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-10-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-11-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-12-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-01-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-02-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-04-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-05-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-06-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-07-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-08-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-09-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-10-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-11-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-12-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-01-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-02-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-03-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-05-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-06-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-07-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-08-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-09-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-10-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-11-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-12-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-01-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-03-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-03-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-05-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-06-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-07-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-09-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-10-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-11-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-12-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1984-01-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1986-10-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1986-11-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-01-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-02-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-03-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-05-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-06-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-07-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-09-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-10-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-12-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-01-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-03-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-04-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-05-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-06-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-09-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-11-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-12-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-02-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-03-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-05-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-06-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-08-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-09-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-11-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-12-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-02-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-03-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-05-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-06-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-08-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-09-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-11-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-12-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-02-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-03-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-05-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-08-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-09-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1992-06-24	---	---	33.2	---	---	314	0.090	---	---	0.25	---	---	9.1	---	---
WQ0197	1992-09-30	---	---	33.1	---	---	317	0.030	---	---	0.22	---	---	5.5	---	---
WQ0197	1993-01-04	---	---	36.8	---	---	384	0.070	---	---	0.18	---	---	6.3	---	---
WQ0197	1993-04-15	---	---	21.7	---	---	222	0.090	---	---	0.52	---	---	5.2	---	---
WQ0197	1993-06-23	---	---	33.5	---	---	314	0.130	---	---	0.29	---	---	5.0	---	---
WQ0197	1993-09-29	---	---	33.2	---	---	300	0.030	---	---	0.15	---	---	7.9	---	---
WQ0197	1994-01-04	---	---	61.0	---	---	553	0.710	---	---	0.27	---	---	11.9	---	---
WQ0197	1994-04-05	---	---	27.3	---	---	276	0.050	---	---	0.20	---	---	8.4	---	---
WQ0197	1994-07-04	---	---	30.4	---	---	294	0.090	---	---	0.41	---	---	5.0	---	---
WQ0197	1994-10-03	---	---	31.7	---	---	300	0.030	---	---	0.19	---	---	7.0	---	---
WQ0197	1995-01-03	---	---	42.3	---	---	431	0.050	---	---	0.28	---	---	6.6	---	---
WQ0197	1995-04-04	---	---	18.1	---	---	196	0.060	---	---	0.68	---	---	10.7	---	---
WQ0197	1995-07-04	---	---	33.0	---	---	323	0.080	---	---	0.29	---	---	8.1	---	---
WQ0197	1995-10-03	---	---	30.1	---	---	303	0.039	---	---	0.20	---	---	6.7	---	---
WQ0197	1996-01-02	---	---	36.3	---	---	397	0.036	---	---	0.11	---	---	5.9	---	---
WQ0197	1996-04-01	---	---	34.4	---	---	367	0.032	---	---	0.16	---	---	8.0	---	---
WQ0197	1996-05-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1996-06-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1996-07-08	---	---	33.4	---	---	303	0.080	---	---	0.23	---	---	10.1	---	---

Appendix 6. (Continued).

Site	Sample Date	Calcium Total mg/L	Calcium Dissolved mg/L	Magnesium Extractable mg/L	Magnesium Total mg/L	Magnesium Dissolved mg/L	Hardness (CaCO3) mg/L	Manganese Extractable mg/L	Manganese Total mg/L	Manganese Dissolved mg/L	Iron Extractable mg/L	Iron Total mg/L	Iron Dissolved mg/L	Potassium Extractable mg/L	Potassium Total mg/L	Potassium Dissolved mg/L
WQ0197	1996-07-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1996-08-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1996-09-29	—	—	32.4	—	—	297	0.019	—	—	0.13	—	—	7.9	—	—
WQ0197	1997-01-06	—	—	43.1	—	—	424	0.069	—	—	0.10	—	—	8.8	—	—
WQ0197	1997-04-09	—	—	24.0	—	—	258	0.045	—	—	0.52	—	—	9.9	—	—
WQ0197	1997-05-13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-06-10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-07-07	—	—	27.6	—	—	292	0.039	—	—	0.17	—	—	4.9	—	—
WQ0197	1997-07-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-08-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-10-06	68.6	65.7	29.4	29.3	29	294	0.034	0.036	< 0.005	0.16	0.36	0.02	6.5	6.9	6.60
WQ0197	1998-01-05	99.6	98.7	36.3	37.5	38.5	386	0.018	0.018	0.015	0.12	0.18	0.01	6.2	6.2	6.60
WQ0197	1998-04-07	51.9	43.1	18.3	19.4	16.1	201	0.148	0.161	< 0.005	1.54	3.82	0.11	8.6	9.9	8.80
WQ0197	1998-05-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-06-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-07-06	94.8	—	—	44.7	—	421	—	0.098	—	—	1.07	—	—	8.1	—
WQ0197	1998-07-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-08-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-10-04	77.5	—	—	37.5	—	348	—	0.023	—	—	0.22	—	—	8.6	—
WQ0197	1999-04-06	67.3	—	—	29.6	—	290	—	0.187	—	—	2.64	—	—	9.3	—
WQ0197	1999-05-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-06-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-07-07	80.7	—	—	47.3	—	396	—	0.047	—	—	0.36	—	—	8.4	—
WQ0197	1999-07-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-08-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-10-04	66.9	—	—	37.8	—	323	—	0.011	—	—	0.23	—	—	8.3	—
WQ0197	2000-01-10	99.3	—	—	59.5	—	493	—	0.109	—	—	0.38	—	—	10.8	—
WQ0197	2000-04-03	61.9	—	—	30.7	—	281	—	0.119	—	—	1.47	—	—	9.3	—
WQ0197	2000-05-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-06-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-07-04	69.2	—	—	37.6	—	328	—	0.089	—	—	0.79	—	—	6.2	—
WQ0197	2000-07-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-08-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-10-02	63.5	—	—	41.5	—	329	—	0.041	—	—	0.78	—	—	9.0	—
WQ0197	2001-01-10	101.0	—	—	47.3	—	447	—	0.264	—	—	0.39	—	—	8.0	—
WQ0197	2001-04-10	48.8	—	—	19	—	200	—	0.295	—	—	2.19	—	—	7.54	—
WQ0197	2001-05-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-06-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-07-03	60.1	—	—	35.6	—	320	—	0.071	—	—	0.73	—	—	8.78	—
WQ0197	2001-07-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-08-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-10-01	61.5	—	—	30.5	—	317	—	0.035	—	—	0.24	—	—	7.88	—
Waterhen River																
WQ0561	1981-08-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-09-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-10-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-11-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-12-07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-01-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-02-23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-03-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-05-26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-07-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-08-31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-09-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-10-28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-11-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-12-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-05-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-06-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-08-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-08-31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-10-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-11-02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-11-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-12-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1984-02-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1984-03-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1987-07-08	—	—	28.9	—	—	211	0.030	—	—	0.07	—	—	8.5	—	—
WQ0561	1987-11-04	—	—	27.3	—	—	232	0.020	—	—	0.10	—	—	7.5	—	—
WQ0561	1988-05-04	—	—	24.3	—	—	204	0.240	—	—	0.22	—	—	7.0	—	—
WQ0561	1988-07-04	—	—	27.7	—	—	214	0.030	—	—	0.04	—	—	7.5	—	—
WQ0561	1988-10-03	—	—	30.5	—	—	239	0.020	—	—	0.11	—	—	9.5	—	—
WQ0561	1989-04-10	—	—	38.9	—	—	350	0.050	—	—	< 0.020	—	—	11.5	—	—
WQ0561	1989-07-10	—	—	31.4	—	—	220	0.030	—	—	0.12	—	—	8.4	—	—
WQ0561	1989-10-10	—	—	31.4	—	—	234	0.030	—	—	0.06	—	—	9.0	—	—
WQ0561	1990-04-09	—	—	42.8	—	—	363	0.090	—	—	0.08	—	—	13.5	—	—
WQ0561	1990-06-25	—	—	25.5	—	—	208	0.050	—	—	0.04	—	—	8.0	—	—
WQ0561	1990-10-09	—	—	30.9	—	—	224	0.030	—	—	0.02	—	—	9.7	—	—
WQ0561	1991-04-15	—	—	28.4	—	—	253	0.080	—	—	0.07	—	—	10.4	—	—
WQ0561	1991-06-24	—	—	28.5	—	—	210	0.050	—	—	0.02	—	—	9.3	—	—
WQ0561	1991-09-30	—	—	24.9	—	—	173	< 0.020	—	—	0.02	—	—	9.8	—	—
WQ0561	1992-04-13	—	—	40.5	—	—	346	0.090	—	—	0.05	—	—	14.0	—	—
WQ0561	1992-06-22	—	—	30.4	—	—	232	0.030	—	—	0.03	—	—	8.8	—	—
WQ0561	1992-09-28	—	—	32.1	—	—	238	< 0.020	—	—	0.05	—	—	9.3	—	—
WQ0561	1993-04-13	—	—	35.1	—	—	300	0.040	—	—	0.12	—	—	11.0	—	—
WQ0561	1993-06-21	—	—	32.8	—	—	239	0.020	—	—	0.05	—	—	9.9	—	—
WQ0561	1993-09-27	—	—	29.2	—	—	226	< 0.020	—	—	0.08	—	—	9.3	—	—
WQ0561	1994-04-11	—	—	39.5	—	—	336	0.050	—	—	0.06	—	—	12.8	—	—
WQ0561	1994-06-27	—	—	30.4	—	—	229	0.020	—	—	0.03	—	—	9.0	—	—
WQ0561	1994-08-29	—	—	30.9	—	—	205	0.020	—	—	0.05	—	—	10.2	—	—
WQ0561	1994-09-26	—	—	31.4	—	—	220	< 0.020	—	—	0.06	—	—	10.5	—	—
WQ0561	1995-04-18	—	—	32.7	—	—	268	0.020	—	—	0.04	—	—	11.3	—	—
WQ0561	1995-07-24	—	—	27.0	—	—	179	< 0.020	—	—	0.02	—	—	8.0	—	—
WQ0561	1995-08-23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1995-10-10	—	—	28.0	—	—	220	0.007	—	—	0.03	—	—	9.5	—	—
WQ0561	1996-05-13	—	—	26.6	—	—	231	0.018	—	—	0.13	—	—	8.8	—	—
WQ0561	1996-06-24	—	—	28.1	—	—	235	0.009	—	—	0.01	—	—	9.1	—	—
WQ0561	1996-09-30	—	—	26.6	—	—	211	0.014	—	—	0.02	—	—	8.7	—	—
WQ0561	1997-04-22	—	—	27.6	—	—	248	0.022	—	—	0.03	—	—	9.3	—	—
WQ0561	1997-06-26	—	—	24.2	—	—	216	0.018	—	—	0.02	—	—	8.1	—	—
WQ0561	1997-10-21	42.5	42.2	25.6	25.4	25.2	212	0.007	0.008	< 0.005	0.01	0.10	< 0.01	8.9	8.6	8.90
WQ0561	1998-04-27	49.5	47.9	26.6	27.2	27.2	236	0.014	0.015	< 0.005	0.03	0.03	0.01	9.2	9.6	9.60
WQ0561	1998-07-06	40.7	—	—	25.0	—	205	—	0.024	—	—	< 0.01	—	—	10.1	—
WQ0561	1998-10-14	44.3	—	—	31.0	—	238	—	0.009	—	—	0.09	—	—	9.5	—
WQ0561	1999-04-19	48.5	—	—	25.8	—	227	—	0.008	—	—	0.06	—	—	8.8	—

Appendix 6. (Continued).

Site	Sample Date	Calcium Total mg/L	Calcium Dissolved mg/L	Magnesium Extractable mg/L	Magnesium Total mg/L	Magnesium Dissolved mg/L	Hardness (CaCO3) mg/L	Manganese Extractable mg/L	Manganese Total mg/L	Manganese Dissolved mg/L	Iron Extractable mg/L	Iron Total mg/L	Iron Dissolved mg/L	Potassium Extractable mg/L	Potassium Total mg/L	Potassium Dissolved mg/L
WQ0561	1999-07-06	40.6	---	---	28.1	---	217	---	0.017	---	---	0.02	---	---	8.8	---
WQ0561	1999-09-20	40.9	---	---	31.2	---	231	---	0.010	---	---	0.06	---	---	9.5	---
WQ0561	2000-04-18	58.8	---	---	35.7	---	294	---	0.007	---	---	0.12	---	---	10.9	---
WQ0561	2000-06-27	40.8	---	---	28.7	---	220	---	0.016	---	---	0.11	---	---	9.0	---
WQ0561	2000-10-04	41.3	---	---	29.6	---	225	---	0.011	---	---	0.27	---	---	9.9	---
WQ0561	2001-04-22	62.3	---	---	29.7	---	278	---	0.051	---	---	0.10	---	---	9.57	---
WQ0561	2001-07-16	32.9	---	---	27.4	---	195	---	0.018	---	---	0.08	---	---	7.88	---
WQ0561	2001-09-25	30.5	---	---	29.3	---	197	---	0.005	---	---	0.06	---	---	9.02	---
Fairford River																
WQ0364	1978-01-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-02-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-04-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-05-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-06-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-07-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-10-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-11-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-12-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-01-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-02-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-04-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-05-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-05-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-06-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-07-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-08-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-10-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-10-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-11-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-12-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-01-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-02-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-03-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-04-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-05-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-06-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-07-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-08-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-09-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-10-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-11-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-12-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-01-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-02-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-03-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-04-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-05-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-06-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-07-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-08-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-09-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-10-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-11-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-12-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-01-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-02-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-03-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-04-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-05-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-07-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-08-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-09-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-10-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-11-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-12-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-02-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-03-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-04-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-05-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-06-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-08-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-08-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-10-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-11-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-11-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-12-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1984-02-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1984-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1994-08-29	---	---	45.3	---	---	290	< 0.020	---	---	0.08	---	---	14.4	---	---

Appendix 6. (Continued).

Site	Sample Date	Sodium Extractable mg/L	Sodium Total mg/L	Sodium Dissolved mg/L	Chloride mg/L	Sulphate mg/L	Boron Extractable mg/L	Boron Soluble mg/L	Dissolved Oxygen mg/L	B.O.D mg/L	Total Carbon mg/L	Total Organic Carbon mg/L	Total Inorganic Carbon mg/L	Total Kjeldahl Nitrogen mg/L	Total Kjeldahl Nitrogen Dissolved mg/L	Total Kjeldahl Nitrogen Particulate mg/L
Assiniboine Diversion est.																
WQ0014	1971-04-22	33.0	—	—	14	100	—	—	10.2	2.1	—	—	—	—	—	—
WQ0014	1972-04-27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1972-05-24	33.0	—	—	10	120	—	—	7.3	0.4	—	—	—	—	—	—
WQ0014	1973 No Flow															
WQ0014	1974-04-05	60.0	—	—	27	240	—	—	7.8	1.8	—	—	—	—	—	—
WQ0014	1974-05-02	25.0	—	—	12	96	—	—	8.8	1.8	—	13.5	—	0.70	—	—
WQ0014	1974-06-04	56.0	—	—	24	165	—	—	7.1	1.1	—	53.5	46.5	0.70	—	—
WQ0014	1975-05-27	50.0	—	—	17	165	—	—	7.5	1.0	—	18.5	40.5	0.90	—	—
WQ0014	1976-05-04	48.0	—	—	15	150	—	—	9.3	—	—	19.0	43.5	1.10	—	—
WQ0014	1977 No Flow															
WQ0391	1978-04-18	—	—	—	—	—	—	—	11.3	—	—	21.5	37.5	2.70	—	—
WQ0391	1979-04-25	—	—	—	—	—	—	—	12.7	—	—	38.5	36.0	1.70	—	—
WQ0391	1979-04-30	—	—	—	—	—	—	—	—	—	—	29.5	29.5	1.50	—	—
WQ0391	1979-05-17	—	—	—	—	—	—	—	10.7	—	—	16.5	34.0	1.00	—	—
WQ0391	1979-06-20	—	—	—	—	—	—	—	8.5	—	—	19.5	45.0	0.85	—	—
WQ0391	1980 No Flow															
WQ0391	1981 No Flow															
WQ0391	1982-04-27	—	—	—	—	—	—	—	11.3	—	—	11.5	21.5	1.10	—	—
WQ0391	1983-04-21	—	—	—	—	—	—	—	12.9	—	—	14.5	33.0	1.20	—	—
WQ0391	1983-05-19	—	—	—	—	—	—	—	10.6	—	—	14.5	48.0	1.00	—	—
WQ0391	1984 No Flow															
WQ0014	No Spnng Sampl															
WQ0014	1985-11-13	63.9	—	—	36	203	0.18	—	12.9	—	—	—	—	0.90	—	—
WQ0014	1986-04-09	28.0	—	—	14	63	0.08	—	10.4	—	—	24.5	21.8	1.30	0.85	0.45
WQ0014	May 86 No Flow															
WQ0014	1986-06-02	—	—	—	—	—	—	—	8.2	—	—	—	—	0.90	0.80	0.10
WQ0014	1987-04-06	23.2	—	—	11	75	0.12	—	12.4	—	—	29.7	34.9	1.35	1.15	0.20
WQ0014	1988 No Flow															
WQ0014	1989-04-04	26.3	—	—	18	135	0.21	—	12.1	—	—	9.0	22.0	—	—	—
WQ0014	1990 No Flow															
WQ0014	1991 No Flow															
WQ0014	1992-04-07	30.8	—	—	16	115	0.09	—	12.1	—	57.0	15.0	42.0	1.55	0.83	0.72
WQ0014	1992-05-04	39.2	—	—	21	149	0.12	—	10.3	—	57.0	11.0	46.0	0.83	0.58	0.25
WQ0014	1993 Aug. Flow															
WQ0014	1993-08-09	56.6	—	—	28	178	0.14	—	8.6	—	74.0	11.0	63.0	0.87	0.67	< 0.20
WQ0014	1994-07-05	115.0	—	—	64	287	0.22	—	8.5	—	44.5	6.5	57.0	0.85	0.64	0.21
WQ0014	1994-08-09	59.3	—	—	27	189	0.15	—	8.5	—	67.7	20.4	60.0	1.21	0.76	0.45
WQ0014	1994-09-06	47.4	—	—	22	168	0.15	—	8.9	—	72.2	14.4	57.8	1.16	0.79	0.37
WQ0014	1995-04-05	37.4	—	—	17	183	0.12	—	14.2	—	54.8	12.8	44.5	1.56	1.29	0.27
WQ0014	1995-05-01	25.0	—	—	11	82	0.10	—	—	—	43.1	15.5	27.6	1.51	0.73	0.78
WQ0014	1996-04-02	51.6	—	—	22	256	—	0.10	10.3	—	78.6	13.9	64.7	1.22	1.01	0.21
WQ0014	1996-05-06	43.3	—	—	19	185	—	—	10.4	—	50.4	11.2	39.2	1.40	0.84	0.56
WQ0014	1996-06-10	70.8	—	—	28	232	—	—	8.6	—	64.8	10.8	54.0	1.10	—	—
WQ0014	1997-04-10	25.7	—	—	13	102	—	0.06	12.4	—	49.6	12.7	36.9	1.45	—	—
WQ0014	1997-05-05	39.5	—	—	17	132	—	—	10.2	—	58.0	18.5	39.5	0.74	—	—
WQ0014	1998-04-08	22.3	23.1	22.9	< 10	99	—	< 0.05	8.6	3.0	41.0	13.0	28.0	2.10	—	—
WQ0014	1999-04-07	—	26.2	—	17	109	—	—	12.9	3.0	48.0	13.0	35.0	1.80	—	—
WQ0014	1999-04-13	—	37.3	—	19	132	—	—	10.7	—	51.0	11.0	40.0	1.70	—	—
WQ0014	1999-05-03	—	—	—	—	—	—	—	8.8	3.0	56.0	12.0	44.0	1.20	—	—
WQ0014	1999-06-01	—	—	—	—	—	—	—	8.3	1.0	71.0	15.0	56.0	1.40	—	—
WQ0014	2000 No Flow															
WQ0014	2001-04-11	—	28.4	—	13	100		0.06	—	7.0	48.0	11.0	36.0	2.50	—	—
WQ0014	2001-05-07	—	38.5	—	15	149		—	10.0	2.0	63.0	16.0	46.0	2.00	—	—
WQ0014	2001-07-04	—	63.5	—	22	253		0.13	8.8	1.0	79.0	15.0	64.0	1.70	—	—
Whitemud River																
WQ0197	1973-05-24	16.0	—	—	12	83	—	—	11.0	1.1	—	15.5	61.5	0.80	—	—
WQ0197	1973-07-26	22.0	—	—	34	44	—	—	7.4	1.4	—	18.5	39.5	0.30	—	—
WQ0197	1973-10-04	20.0	—	—	33	60	—	—	8.1	1.7	—	31.5	—	—	—	—
WQ0197	1974-01-22	—	—	—	56	50	—	—	5.8	< 0.5	—	—	—	—	—	—
WQ0197	1974-01-31	—	—	—	—	65	—	—	6.3	1.2	—	—	—	—	—	—
WQ0197	1974-04-22	—	—	—	4	57	—	—	11.4	3.4	—	—	—	1.40	—	—
WQ0197	1974-08-26	23.0	—	—	18	65	—	—	6.5	2.7	—	12.5	44.0	0.90	—	—
WQ0197	1974-10-16	30.0	—	—	22	85	—	—	9.4	1.4	—	17.5	66.5	0.80	—	—
WQ0197	1975-02-11	30.0	—	—	34	84	—	—	5.5	< 0.1	—	100.0	81.5	0.70	—	—
WQ0197	1975-06-03	17.0	—	—	12	105	—	—	5.1	2.0	—	16.0	60.0	1.00	—	—
WQ0197	1975-09-03	18.0	—	—	10	55	—	—	6.1	0.6	—	16.0	52.5	0.70	—	—
WQ0197	1975-11-24	22.0	—	—	13	80	—	—	12.0	2.1	—	21.5	63.5	0.70	—	—
WQ0197	1976-02-11	22.0	—	—	18	85	—	—	4.8	1.4	—	20.0	95.5	1.20	—	—
WQ0197	1976-04-29	10.0	—	—	10	60	—	—	8.7	1.9	—	20.0	37.0	0.80	—	—
WQ0197	1976-07-05	22.0	—	—	17	80	—	—	6.9	1.0	—	23.0	57.5	1.20	—	—
WQ0197	1976-09-14	35.0	—	—	42	85	—	—	7.0	3.7	—	20.0	57.0	1.20	—	—
WQ0197	1977-01-05	72.0	—	—	102	135	—	—	1.7	1.1	—	20.0	122.0	1.50	—	—
WQ0197	1977-04-28	15.0	—	—	12	55	—	—	8.2	1.9	—	22.0	58.0	0.70	—	—
WQ0197	1977-07-14	12.0	—	—	15	45	—	—	7.2	1.6	—	18.0	45.5	0.95	—	—
WQ0197	1977-10-12	15.0	—	—	15	46	—	—	10.1	2.0	—	18.0	67.5	0.80	—	—
WQ0197	1978-01-24	—	—	—	—	—	—	—	7.3	—	—	18.5	97.5	0.50	—	—
WQ0197	1978-02-14	—	—	—	—	—	—	—	4.5	—	—	16.0	105.0	0.30	—	—
WQ0197	1978-03-29	—	—	—	—	—	—	—	9.0	—	—	12.5	43.0	0.60	—	—
WQ0197	1978-04-18	—	—	—	—	—	—	—	11.3	—	—	20.5	46.0	1.10	—	—
WQ0197	1978-05-16	—	—	—	—	—	—	—	11.1	—	—	18.5	65.5	0.80	—	—
WQ0197	1978-06-20	—	—	—	—	—	—	—	8.7	—	—	18.5	67.0	0.60	—	—
WQ0197	1978-07-25	—	—	—	—	—	—	—	6.9	—	—	20.5	66.0	0.70	—	—
WQ0197	1978-08-24	—	—	—	—	—	—	—	9.7	—	—	18.0	56.0	0.70	—	—
WQ0197	1978-09-21	—	—	—	—	—	—	—	9.4	—	—	16.0	59.0	0.60	—	—
WQ0197	1978-10-16	—	—	—	—	—	—	—	10.7	—	—	18.5	65.0	0.60	—	—
WQ0197	1978-11-09	—	—	—	—	—	—	—	12.1	—	—	14.5	77.5	0.50	—	—
WQ0197	1978-12-12	—	—	—	—	—	—	—	8.4	—	—	21.5	95.0	0.60	—	—
WQ0197	1979-01-18	—	—	—	—	—	—	—	6.7	—	—	18.5	98.5	0.80	—	—
WQ0197	1979-02-15	—	—	—	—	—	—	—	7.1	—	—	16.0	98.5	0.60	—	—
WQ0197	1979-03-15	—	—	—	—	—	—	—	6.8	—	—	16.0	95.5	0.50	—	—
WQ0197	1979-04-25	—	—	—	—	—	—	—	11.2	—	—	24.5	23.5	1.30	—	—
WQ0197	1979-04-30	—	—	—	—	—	—	—	10.4	—	—	52.0	22.0	1.20	—	—
WQ0197	1979-05-17	—	—	—	—	—	—	—	8.7	—	—	37.5	33.5	1.00	—	—
WQ0197	1979-06-20	—	—	—	—	—	—	—	5.7	—	—	26.5	47.5	1.10	—	—
WQ0197	1979-07-19	—	—	—	—	—	—	—	7.1	—	—	32.5	53.5	1.00	—	—
WQ0197	1979-08-22	—	—	—	—	—	—	—	6.3	—	—	23.5	50.0	1.00	—	—
WQ0197	1979-09-24	—	—	—	—	—	—	—	9.7	—	—	19.5	49.5	0.85	—	—
WQ0197	1979-10-16	—	—	—	—	—	—	—	9.3	—	—	16.0	54.5	0.75	—	—
WQ0197	1979-11-08	—	—	—	—	—	—	—	12.3	—	—	—	—	0.75	—	—
WQ0197	1979-12-03	—	—	—	—	—	—	—	10.3	—	—	—	—	0.85	—	—
WQ0197	1980-01-15	—	—	—	—	—	—	—	6.2	—	—	18.0	104.0	0.90	—	—
WQ0197	1980-02-18	—	—	—	—	—	—	—	5.7	—	—	32.0	78.0	0.60	—	—
WQ0197	1980-03-20	—	—	—	—	—	—	—	6.0	—	—	11.0	85.5	0.80	—	—
WQ0197	1980-04-09	—	—	—	9	—	—	—	12.2	7.0	—	10.0	47.0	0.80	—	—
WQ0197	1980-04-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Appendix 6. (Continued).

Site	Sample Date	Sodium Extractable mg/L	Sodium Total mg/L	Sodium Dissolved mg/L	Chloride mg/L	Sulphate mg/L	Boron Extractable mg/L	Boron Soluble mg/L	Dissolved Oxygen mg/L	B.O.D. mg/L	Total Carbon mg/L	Total Organic Carbon mg/L	Total Inorganic Carbon mg/L	Total Kjeldahl Nitrogen mg/L	Total Kjeldahl Nitrogen Dissolved mg/L	Total Kjeldahl Nitrogen Particulate mg/L
WQ0197	1980-05-08	---	---	---	---	---	---	---	11.1	---	---	17.5	61.5	0.70	---	---
WQ0197	1980-06-17	---	---	---	---	---	---	---	7.4	---	---	19.5	61.0	1.20	---	---
WQ0197	1980-07-17	---	---	---	---	---	---	---	9.2	---	---	19.0	52.5	0.80	---	---
WQ0197	1980-08-14	---	---	---	---	---	---	---	6.9	---	---	15.0	56.5	0.80	---	---
WQ0197	1980-09-10	---	---	---	---	---	---	---	7.6	---	---	16.5	60.0	0.90	---	---
WQ0197	1980-10-21	---	---	---	---	---	---	---	11.2	---	---	13.5	65.5	0.70	---	---
WQ0197	1980-11-12	---	---	---	---	---	---	---	12.7	---	---	17.5	64.5	0.60	---	---
WQ0197	1980-12-18	---	---	---	---	---	---	---	8.5	---	---	20.0	103.0	1.00	---	---
WQ0197	1981-01-07	---	---	---	---	---	---	---	5.3	---	---	23.5	128.0	1.60	---	---
WQ0197	1981-02-12	---	---	---	---	---	---	---	3.9	---	---	14.0	119.0	1.00	---	---
WQ0197	1981-03-12	---	---	---	---	---	---	---	11.4	---	---	21.5	67.5	0.70	---	---
WQ0197	1981-04-15	---	---	---	---	---	---	---	13.3	---	---	13.0	50.5	0.70	---	---
WQ0197	1981-05-21	---	---	---	---	---	---	---	9.7	---	---	16.0	68.0	0.80	---	---
WQ0197	1981-06-17	---	---	---	---	---	---	---	6.0	---	---	46.5	32.0	0.90	---	---
WQ0197	1981-07-15	---	---	---	---	---	---	---	6.5	---	---	18.5	63.5	1.00	---	---
WQ0197	1981-08-20	---	---	---	---	---	---	---	7.6	---	---	15.5	55.5	0.90	---	---
WQ0197	1981-09-16	---	---	---	---	---	---	---	8.7	---	---	13.5	49.0	0.90	---	---
WQ0197	1981-10-21	---	---	---	---	---	---	---	11.2	---	---	20.0	69.0	0.60	---	---
WQ0197	1981-11-18	---	---	---	---	---	---	---	12.5	---	---	10.0	67.0	0.50	---	---
WQ0197	1981-12-09	---	---	---	---	---	---	---	12.9	---	---	15.0	84.5	0.90	---	---
WQ0197	1982-01-20	---	---	---	---	---	---	---	1.0	---	---	30.5	127.0	1.40	---	---
WQ0197	1982-02-22	---	---	---	---	---	---	---	3.6	---	---	14.5	96.0	1.10	---	---
WQ0197	1982-03-18	---	---	---	---	---	---	---	7.5	---	---	14.5	64.5	1.40	---	---
WQ0197	1982-04-27	---	---	---	---	---	---	---	9.4	---	---	21.0	30.5	1.10	---	---
WQ0197	1982-05-18	---	---	---	---	---	---	---	9.3	---	---	17.0	52.5	1.00	---	---
WQ0197	1982-06-14	---	---	---	---	---	---	---	8.3	---	---	27.0	59.5	0.80	---	---
WQ0197	1982-07-19	---	---	---	---	---	---	---	7.7	---	---	25.5	54.0	1.10	---	---
WQ0197	1982-08-25	---	---	---	---	---	---	---	8.5	---	---	13.5	51.5	0.80	---	---
WQ0197	1982-09-20	---	---	---	---	---	---	---	8.7	---	---	---	---	0.80	---	---
WQ0197	1982-10-06	---	---	---	---	---	---	---	9.1	---	---	---	---	0.70	---	---
WQ0197	1982-11-08	---	---	---	---	---	---	---	13.2	---	---	12.0	65.0	0.50	---	---
WQ0197	1982-12-14	---	---	---	---	---	---	---	10.2	---	---	23.0	61.0	0.75	---	---
WQ0197	1983-01-25	---	---	---	---	---	---	---	2.3	---	---	63.5	108.0	0.90	---	---
WQ0197	1983-03-03	---	---	---	---	---	---	---	2.9	---	---	31.0	100.0	0.70	---	---
WQ0197	1983-03-28	---	---	---	---	---	---	---	3.4	---	---	12.5	96.0	0.80	---	---
WQ0197	1983-04-27	---	---	---	---	---	---	---	8.9	---	---	18.5	33.0	1.30	---	---
WQ0197	1983-05-16	---	---	---	---	---	---	---	12.4	---	---	37.5	49.5	0.90	---	---
WQ0197	1983-06-29	---	---	---	---	---	---	---	7.6	---	---	35.5	62.0	1.50	---	---
WQ0197	1983-07-20	---	---	---	---	---	---	---	5.3	---	---	56.0	21.0	0.90	---	---
WQ0197	1983-09-06	---	---	---	---	---	---	---	7.8	---	---	13.5	51.0	0.90	---	---
WQ0197	1983-09-26	---	---	---	---	---	---	---	11.3	---	---	13.5	59.5	0.80	---	---
WQ0197	1983-10-24	---	---	---	---	---	---	---	10.7	---	---	11.0	75.0	0.70	---	---
WQ0197	1983-11-15	---	---	---	---	---	---	---	12.1	---	---	20.0	69.0	0.50	---	---
WQ0197	1983-12-06	---	---	---	---	---	---	---	10.3	---	---	52.0	78.0	0.90	---	---
WQ0197	1984-01-18	---	---	---	---	---	---	---	2.8	---	---	29.0	120.0	1.50	---	---
WQ0197	1986-10-14	---	---	---	---	---	---	---	11.4	1.6	---	---	---	1.00	---	---
WQ0197	1986-11-25	---	---	---	---	---	---	---	7.6	3.0	---	---	---	1.10	---	---
WQ0197	1987-01-12	---	---	---	---	---	---	---	5.5	< 3.0	---	---	---	1.45	---	---
WQ0197	1987-02-17	---	---	---	---	---	---	---	---	1.9	---	---	---	1.00	---	---
WQ0197	1987-03-31	---	---	---	---	---	---	---	10.0	4.4	---	---	---	1.40	---	---
WQ0197	1987-05-12	---	---	---	---	---	---	---	7.7	< 1.0	---	55.3	68.8	1.15	---	---
WQ0197	1987-06-22	---	---	---	---	---	---	---	4.6	< 3.0	---	---	---	1.15	---	---
WQ0197	1987-07-29	---	---	---	---	---	---	---	7.2	< 1.0	---	---	---	1.15	---	---
WQ0197	1987-09-03	---	---	---	---	---	---	---	9.1	< 1.0	---	---	---	0.95	---	---
WQ0197	1987-10-22	---	---	---	---	---	---	---	12.1	1.7	---	---	---	0.60	---	---
WQ0197	1987-12-02	---	---	---	---	---	---	---	12.8	3.3	---	---	---	1.05	---	---
WQ0197	1988-01-11	---	---	---	---	---	---	---	4.6	< 3.0	---	---	---	0.80	---	---
WQ0197	1988-03-01	---	---	---	---	---	---	---	1.7	< 3.0	---	---	---	2.00	---	---
WQ0197	1988-04-13	---	---	---	---	---	---	---	11.7	2.0	---	---	---	0.90	---	---
WQ0197	1988-05-24	---	---	---	---	---	---	---	5.5	1.7	---	---	---	0.80	---	---
WQ0197	1988-06-21	---	---	---	---	---	---	---	7.7	1.5	---	---	---	1.10	---	---
WQ0197	1988-08-16	---	---	---	---	---	---	---	7.7	2.0	---	---	---	0.80	---	---
WQ0197	1988-09-28	---	---	---	---	---	---	---	9.1	1.2	---	---	---	0.70	---	---
WQ0197	1988-11-07	---	---	---	---	---	---	---	11.9	2.1	---	---	---	0.55	---	---
WQ0197	1988-12-12	---	---	---	---	---	---	---	8.9	3.0	---	---	---	0.65	---	---
WQ0197	1989-02-06	---	---	---	---	---	---	---	2.1	< 1.0	---	---	---	1.25	---	---
WQ0197	1989-03-06	---	---	---	---	---	---	---	2.5	2.0	---	---	---	1.10	---	---
WQ0197	1989-05-01	---	---	---	---	---	---	---	10.3	< 1.0	---	---	---	0.70	---	---
WQ0197	1989-06-05	---	---	---	---	---	---	---	8.3	< 1.0	---	---	---	0.85	---	---
WQ0197	1989-08-01	---	---	---	---	---	---	---	5.7	2.2	---	---	---	1.20	---	---
WQ0197	1989-09-05	---	---	---	---	---	---	---	---	< 1.0	---	---	---	0.85	---	---
WQ0197	1989-11-06	---	---	---	---	---	---	---	13.4	1.6	---	---	---	0.80	---	---
WQ0197	1989-12-11	---	---	---	---	---	---	---	8.7	1.0	---	---	---	0.95	---	---
WQ0197	1990-02-06	---	---	---	---	---	---	---	1.9	< 1.0	---	---	---	1.75	---	---
WQ0197	1990-03-05	---	---	---	---	---	---	---	2.3	< 1.0	---	---	---	0.85	---	---
WQ0197	1990-05-07	---	---	---	---	---	---	---	7.5	1.6	---	---	---	0.85	---	---
WQ0197	1990-06-04	---	---	---	---	---	---	---	8.2	1.1	---	---	---	0.80	---	---
WQ0197	1990-08-07	---	---	---	---	---	---	---	8.1	1.2	---	---	---	1.00	---	---
WQ0197	1990-09-04	---	---	---	---	---	---	---	7.5	< 1.0	---	---	---	0.80	---	---
WQ0197	1990-11-05	---	---	---	---	---	---	---	12.6	1.3	---	---	---	0.60	---	---
WQ0197	1990-12-03	---	---	---	---	---	---	---	9.4	1.4	---	---	---	0.65	---	---
WQ0197	1991-02-04	---	---	---	---	---	---	---	4.7	1.3	---	---	---	1.05	---	---
WQ0197	1991-03-04	---	---	---	---	---	---	---	3.3	1.2	---	---	---	0.80	---	---
WQ0197	1991-05-06	---	---	---	---	---	---	---	11.7	2.4	---	---	---	0.65	---	---
WQ0197	1991-06-03	---	---	---	---	---	---	---	5.7	1.0	---	---	---	0.90	---	---
WQ0197	1991-08-06	---	---	---	---	---	---	---	7.6	1.4	---	---	---	0.85	---	---
WQ0197	1991-09-09	---	---	---	---	---	---	---	6.5	1.1	---	---	---	1.10	---	---
WQ0197	1992-06-24	20.2	---	---	19	93	0.15	---	5.7	---	72.0	7.0	65.0	1.09	0.11	0.98
WQ0197	1992-09-30	24.2	---	---	30	63	0.10	---	10.0	---	66.5	< 5.00	67.0	0.71	0.72	< 0.20
WQ0197	1993-01-04	26.8	---	---	34	15	0.11	---	---	---	82.5	< 5.00	81.0	1.21	1.16	< 0.20
WQ0197	1993-04-15	8.5	---	---	8	30	0.08	---	12.3	---	56.0	6.5	49.5	0.62	0.42	0.20
WQ0197	1993-06-23	20.6	---	---	23	18	0.10	---	6.2	---	79.0	9.0	70.0	0.75	0.68	< 0.20
WQ0197	1993-09-29	25.4	---	---	27	38	0.13	---	8.5	---	78.0	14.0	66.0	1.01	1.06	< 0.20
WQ0197	1994-01-04	41.8	---	---	43	112	0.15	---	0.8	---	124.0	22.0	116.0	1.57	1.48	< 0.20
WQ0197	1994-04-05	13.3	---	---	17	20	0.08	---	8.2	---	68.0	15.0	54.0	0.78	0.73	< 0.20
WQ0197	1994-07-04	19.4	---	---	23	< 10	0.11	---	5.3	---	78.0	15.0	63.0	0.80	0.69	< 0.20
WQ0197	1994-10-03	23.9	---	---	36	< 10	0.11	---	8.8	---	80.5	12.8	67.7	0.93	0.82	< 0.20
WQ0197	1995-01-03	27.5	---	---	37	18	0.08	---	6.7	---	88.4	4.1	84.3	1.16	1.02	< 0.20
WQ0197	1995-04-04	7.1	---	---	< 10	15	0.08	---	10.0	---	58.5	11.4	47.1	1.65	1.27	0.38
WQ0197	1995-07-04	23.0	---	---	14	35	0.12	---	7.0	---	78.3	14.4	63.9	1.20	1.00	0.20
WQ0197	1995-10-03	27.1	---	---	34	14	---	0.07	8.8	---	75.7	13.4	63.9	0.89	0.78	< 0.20
WQ0197	1996-01-02	21.0	---	---	21	10	---	0.05	7.1	---	99.6	12.2	87.4	0.99	0.86	< 0.20
WQ0197	1996-04-01	19.9	---	---	22	< 10	---	0.05	6.4	---	103.0	8.3	94.7	0.91	0.82	< 0.20
WQ0197	1996-05-13	---	---	---	---	---	---	---	9.5	---	---	---	---	1.13	---	---
WQ0197	1996-06-10	---	---	---	---	---	---	---	4.5	---	---	---	---	1.42	---	---
WQ0197	1996-07-08	22.8	---	---	20	20	---	0.07	5.8	---	82.6	20.8	61.8	1.39	1.30	< 0.20

Appendix 6. (Continued).

Site	Sample Date	Sodium Extractable mg/L	Sodium Total mg/L	Sodium Dissolved mg/L	Chloride mg/L	Sulphate mg/L	Boron Extractable mg/L	Boron Soluble mg/L	Dissolved Oxygen mg/L	B.O.D. mg/L	Total Carbon mg/L	Total Organic Carbon mg/L	Total Inorganic Carbon mg/L	Total Kjeldahl Nitrogen mg/L	Total Kjeldahl Nitrogen Dissolved mg/L	Total Kjeldahl Nitrogen Particulate mg/L
WQ0197	1996-07-15	---	---	---	---	---	---	---	6.7	---	---	---	---	1.17	---	---
WQ0197	1996-08-12	---	---	---	---	---	---	---	5.4	---	---	---	---	1.19	---	---
WQ0197	1996-09-29	29.1	---	---	37	20	---	0.06	9.6	---	78.4	16.7	61.7	0.86	0.86	< 0.20
WQ0197	1997-01-06	28.4	---	---	31	< 10	---	0.07	3.4	---	112.0	13.1	98.9	1.35	---	---
WQ0197	1997-04-09	10.6	---	---	14	13	---	0.04	4.5	---	66.6	11.8	54.8	1.06	---	---
WQ0197	1997-05-13	---	---	---	---	---	---	---	8.6	---	---	---	---	0.98	---	---
WQ0197	1997-06-10	---	---	---	---	---	---	---	5.0	---	---	---	---	1.00	---	---
WQ0197	1997-07-07	14.5	---	---	17	27	---	0.09	6.8	---	74.0	10.0	64.0	0.90	---	---
WQ0197	1997-07-15	---	---	---	---	---	---	---	4.4	---	---	---	---	0.80	---	---
WQ0197	1997-08-19	---	---	---	---	---	---	---	6.6	---	---	---	---	0.80	---	---
WQ0197	1997-10-06	34.0	34.0	34.1	51	23	---	0.10	8.7	---	73.0	9.0	64.0	0.70	---	---
WQ0197	1998-01-05	28.1	28.5	30.2	38	31	---	0.07	3.9	---	107.0	9.0	98.0	0.80	---	---
WQ0197	1998-04-07	6.4	6.9	6.7	< 10	33	---	< 0.05	7.9	---	48.0	12.0	36.0	1.70	---	---
WQ0197	1998-05-20	---	---	---	---	---	---	---	5.8	---	---	---	---	1.00	---	---
WQ0197	1998-06-25	---	---	---	---	---	---	---	3.6	---	---	---	---	1.70	---	---
WQ0197	1998-07-06	---	24.5	---	27	90	---	---	6.4	---	89.0	22.0	67.0	1.00	---	---
WQ0197	1998-07-29	---	---	---	---	---	---	---	4.2	---	---	---	---	1.50	---	---
WQ0197	1998-08-20	---	---	---	---	---	---	---	5.4	---	---	---	---	2.00	---	---
WQ0197	1998-10-04	---	28.6	---	30	53	---	---	11.6	---	77.0	13.0	64.0	0.70	---	---
WQ0197	1999-04-06	---	11.4	---	< 10	60	---	---	12.2	---	61.0	11.0	50.0	1.70	---	---
WQ0197	1999-05-20	---	---	---	---	---	---	---	9.4	---	---	---	---	1.50	---	---
WQ0197	1999-06-21	---	---	---	---	---	---	---	7.4	---	---	---	---	2.40	---	---
WQ0197	1999-07-07	---	27.4	---	21	155	---	---	7.2	---	90.0	22.0	68.0	1.20	---	---
WQ0197	1999-07-21	---	---	---	---	---	---	---	9.7	---	---	---	---	1.20	---	---
WQ0197	1999-08-24	---	---	---	---	---	---	---	5.0	---	---	---	---	1.20	---	---
WQ0197	1999-10-04	---	26.8	---	21	87	---	---	11.1	---	75.0	16.0	59.0	1.00	---	---
WQ0197	2000-01-10	---	37.9	---	28	135	---	---	5.3	---	112.0	11.0	101.0	1.80	---	---
WQ0197	2000-04-03	---	15.6	---	17	90	---	---	11.3	---	55.0	11.0	44.0	1.50	---	---
WQ0197	2000-05-15	---	---	---	---	---	---	---	10.9	---	---	---	---	1.20	---	---
WQ0197	2000-06-19	---	---	---	---	---	---	---	5.4	---	---	---	---	1.30	---	---
WQ0197	2000-07-04	---	21.4	---	23	91	---	---	8.7	---	81.0	18.0	63.0	1.10	---	---
WQ0197	2000-07-18	---	---	---	---	---	---	---	5.8	---	---	---	---	1.40	---	---
WQ0197	2000-08-16	---	---	---	---	---	---	---	---	---	---	---	---	1.30	---	---
WQ0197	2000-10-02	---	25.3	---	25	106	---	---	9.7	---	71.0	11.0	60.0	1.00	---	---
WQ0197	2001-01-10	---	25.1	---	24	133	---	---	2.9	---	108.0	14.0	94.0	1.40	---	---
WQ0197	2001-04-10	---	8.7	---	13	35		0.03	---	---	50.0	14.0	36.0	10.70	---	---
WQ0197	2001-05-15	---	---	---	---	---		---	11.7	---	---	---	---	1.00	---	---
WQ0197	2001-06-12	---	---	---	---	---		---	7.0	---	---	---	---	1.30	---	---
WQ0197	2001-07-03	---	15.1	---	10	168		0.06	5.7	---	64.0	19.0	44.0	2.40	---	---
WQ0197	2001-07-16	---	---	---	---	---		---	3.6	---	---	---	---	1.30	---	---
WQ0197	2001-08-14	---	---	---	---	---		---	4.6	---	---	---	---	0.90	---	---
WQ0197	2001-10-01	---	24.9	---	23	105		0.06	10.2	---	86.0	20.0	66.0	1.20	---	---
Waterhen River																
WQ0561	1981-08-18	---	---	---	---	---	---	---	9.8	---	---	18.5	25.0	1.00	---	---
WQ0561	1981-09-14	---	---	---	---	---	---	---	9.6	---	---	18.5	28.0	1.20	---	---
WQ0561	1981-10-19	---	---	---	---	---	---	---	11.8	---	---	25.5	36.0	1.20	---	---
WQ0561	1981-11-16	---	---	---	---	---	---	---	12.9	---	---	28.5	37.0	1.00	---	---
WQ0561	1981-12-07	---	---	---	---	---	---	---	11.3	---	---	24.0	46.0	1.00	---	---
WQ0561	1982-01-25	---	---	---	---	---	---	---	4.2	---	---	32.0	97.5	2.00	---	---
WQ0561	1982-02-23	---	---	---	---	---	---	---	0.3	---	---	71.0	155.0	4.10	---	---
WQ0561	1982-03-22	---	---	---	---	---	---	---	< 0.1	---	---	89.0	183.0	6.40	---	---
WQ0561	1982-05-26	---	---	---	---	---	---	---	9.2	---	---	19.5	35.0	1.10	---	---
WQ0561	1982-07-14	---	---	---	---	---	---	---	10.6	---	---	19.0	31.0	1.10	---	---
WQ0561	1982-08-31	---	---	---	---	---	---	---	10.5	---	---	19.5	24.5	1.10	---	---
WQ0561	1982-09-30	---	---	---	---	---	---	---	9.4	---	---	---	---	0.95	---	---
WQ0561	1982-10-28	---	---	---	---	---	---	---	10.6	---	---	30.0	---	0.90	---	---
WQ0561	1982-11-24	---	---	---	---	---	---	---	10.2	---	---	18.5	41.5	1.00	---	---
WQ0561	1982-12-29	---	---	---	---	---	---	---	5.4	---	---	18.0	58.5	1.20	---	---
WQ0561	1983-05-25	---	---	---	---	---	---	---	11.3	---	---	29.0	30.5	1.10	---	---
WQ0561	1983-06-22	---	---	---	---	---	---	---	8.7	---	---	15.0	28.5	0.85	---	---
WQ0561	1983-08-04	---	---	---	---	---	---	---	8.6	---	---	18.0	27.0	1.10	---	---
WQ0561	1983-08-31	---	---	---	---	---	---	---	9.4	---	---	15.0	28.0	1.00	---	---
WQ0561	1983-10-04	---	---	---	---	---	---	---	11.0	---	---	15.5	31.5	0.90	---	---
WQ0561	1983-11-02	---	---	---	---	---	---	---	10.6	---	---	17.5	31.5	0.95	---	---
WQ0561	1983-11-30	---	---	---	---	---	---	---	12.9	---	---	14.5	38.0	0.90	---	---
WQ0561	1983-12-20	---	---	---	---	---	---	---	12.6	---	---	25.5	50.5	1.00	---	---
WQ0561	1984-02-14	---	---	---	---	---	---	---	7.6	---	---	32.5	59.5	1.10	---	---
WQ0561	1984-03-20	---	---	---	---	---	---	---	6.7	---	---	17.5	59.0	1.00	---	---
WQ0561	1987-07-08	171.0	---	---	275	75	0.11	---	9.7	---	---	11.6	28.9	1.05	0.85	0.20
WQ0561	1987-11-04	178.0	---	---	290	75	0.12	---	10.9	---	---	11.7	33.7	1.10	0.85	0.25
WQ0561	1988-05-04	153.0	---	---	250	62	0.10	---	12.8	---	---	9.2	28.2	0.70	0.60	0.10
WQ0561	1988-07-04	200.0	---	---	286	66	0.16	---	9.1	---	---	11.7	30.8	1.20	0.85	0.45
WQ0561	1988-10-03	196.0	---	---	320	80	0.11	---	10.8	---	---	12.3	32.5	1.05	0.85	0.20
WQ0561	1989-04-10	270.0	---	---	426	104	0.16	---	2.9	---	---	16.0	35.0	1.30	1.10	0.20
WQ0561	1989-07-10	196.0	---	---	340	80	0.13	---	8.5	---	---	13.5	22.5	1.10	1.10	0.00
WQ0561	1989-10-10	226.0	---	---	375	76	0.11	---	11.8	---	36.0	16.0	20.0	1.05	0.80	0.25
WQ0561	1990-04-09	290.0	---	---	460	115	0.17	---	< 0.1	---	---	22.5	54.8	1.75	1.70	0.05
WQ0561	1990-06-25	171.0	---	---	268	84	0.10	---	7.6	---	---	16.0	32.0	0.95	0.80	0.15
WQ0561	1990-10-09	200.0	---	---	310	75	0.14	---	11.4	---	---	15.0	30.0	1.15	0.85	0.30
WQ0561	1991-04-15	182.0	---	---	290	70	0.13	---	6.2	---	---	12.0	47.0	1.55	1.40	0.15
WQ0561	1991-06-24	193.0	---	---	357	80	0.13	---	7.6	---	---	13.0	34.0	1.20	0.95	0.25
WQ0561	1991-09-30	224.0	---	---	346	80	0.16	---	10.3	---	---	13.5	35.0	1.50	0.95	0.55
WQ0561	1992-04-13	285.0	---	---	467	86	0.17	---	< 0.1	---	87.0	22.5	64.5	2.29	2.19	< 0.20
WQ0561	1992-06-22	167.0	---	---	266	75	0.10	---	8.8	---	47.0	9.5	37.5	1.14	0.93	0.21
WQ0561	1992-09-28	187.0	---	---	285	84	0.11	---	10.0	---	47.0	14.0	37.0	1.42	1.22	0.20
WQ0561	1993-04-13	193.0	---	---	331	100	0.12	---	9.5	---	66.0	13.5	53.0	1.79	1.60	< 0.20
WQ0561	1993-06-21	194.0	---	---	305	99	0.12	---	11.4	---	48.0	11.5	37.0	1.45	0.96	0.49
WQ0561	1993-09-27	201.0	---	---	321	94	0.11	---	10.0	---	48.5	14.5	34.0	1.13	0.87	0.26
WQ0561	1994-04-11	252.0	---	---	426	125	0.14	---	3.6	---	72.5	21.5	53.0	1.29	---	---
WQ0561	1994-06-27	190.0	---	---	293	82	0.10	---	9.3	---	48.5	11.0	38.5	1.37	---	---
WQ0561	1994-08-29	207.0	---	---	339	85	---	---	10.8	---	---	---	---	1.68	---	---
WQ0561	1994-09-26	212.0	---	---	271	88	0.13	---	9.3	---	54.2	20.1	36.1	1.46	---	---
WQ0561	1995-04-18	217.0	---	---	351	101	0.10	---	10.1	---	59.1	8.7	50.4	0.90	---	---
WQ0561	1995-07-24	170.0	---	---	260	76	0.10	---	9.2	---	38.4	12.5	25.9	0.68	---	---
WQ0561	1995-08-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1995-10-10	179.0	---	---	277	83	---	0.10	10.3	---	48.3	14.0	34.3	1.02	---	---
WQ0561	1996-05-13	159.0	---	---	239	71	---	0.09	10.7	---	51.4	11.6	39.8	0.74	---	---
WQ0561	1996-06-24	165.0	---	---	249	62	---	0.10	7.9	---	53.2	13.8	39.4	0.79	---	---
WQ0561	1996-09-30	168.0	---	---	275	75	---	0.10	9.7	---	51.3	17.2	34.1	0.90	---	---
WQ0561	1997-04-22	190.0	---	---	295	64	---	0.09	9.2	---	57.5	15.8	41.7	0.68	---	---
WQ0561	1997-06-26	160.0	---	---	277	81	---	0.08	6.8	---	49.0	12.0	37.0	0.60	---	---
WQ0561	1997-10-21	188.0	180.0	188.0	310	67	---	0.11	9.2	---	50.0	12.0	38.0	0.70	---	---
WQ0561	1998-04-27	195.0	196.0	190.0	347	65	---	0.05	8.4	---	52.0	12.0	40.0	0.90	---	---
WQ0561	1998-07-06	---	250.0	---	286	56	---	---	6.3	---	47.0	16.0	31.0	0.80	---	---
WQ0561	1998-10-14	---	220.0	---	287	61	---	---	10.1	---	51.0	16.0	35.0	1.50	---	---
WQ0561	1999-04-19	---	183.0	---	317	69	---	---	10.6	---	50.0	12.0	38.0	0.70	---	---

Appendix 6. (Continued).

Site	Sample Date	Sodium Extractable mg/L	Sodium Total mg/L	Sodium Dissolved mg/L	Chloride mg/L	Sulphate mg/L	Boron Extractable mg/L	Boron Soluble mg/L	Dissolved Oxygen mg/L	B.O.D mg/L	Total Carbon mg/L	Total Organic Carbon mg/L	Total Inorganic Carbon mg/L	Total Kjeldahl Nitrogen mg/L	Total Kjeldahl Nitrogen Dissolved mg/L	Total Kjeldahl Nitrogen Particulate mg/L
WQ0561	1999-07-06	—	180.0	—	281	70	—	—	6.5	—	47.0	14.0	33.0	1.00	—	—
WQ0561	1999-09-20	—	208.0	—	306	75	—	—	3.3	—	47.0	13.0	34.0	1.00	—	—
WQ0561	2000-04-18	—	237.0	—	310	75	—	—	2.8	—	52.0	13.0	39.0	1.20	—	—
WQ0561	2000-06-27	—	191.0	—	296	73	—	—	5.3	—	51.0	18.0	33.0	0.90	—	—
WQ0561	2000-10-04	—	213.0	—	416	74	—	—	3.8	—	49.0	15.0	34.0	1.10	—	—
WQ0561	2001-04-22	—	189.0	—	317	73		0.09	1.7	—	74.0	18.0	56.0	1.60	—	—
WQ0561	2001-07-16	—	160.0	—	274	77		0.10	6.9	—	52.0	18.0	34.0	1.10	—	—
WQ0561	2001-09-25	—	177.0	—	277	76		0.10	9.6	—	46.0	16.0	29.0	0.90	—	—
Fairford River																
WQ0364	1978-01-16	—	—	—	—	—	—	—	17.2	—	—	23.5	41.0	1.20	—	—
WQ0364	1978-02-21	—	—	—	—	—	—	—	10.9	—	—	24.0	37.5	0.70	—	—
WQ0364	1978-03-20	—	—	—	—	—	—	—	9.3	—	—	22.5	48.5	1.00	—	—
WQ0364	1978-04-24	—	—	—	—	—	—	—	10.7	—	—	22.0	49.5	1.20	—	—
WQ0364	1978-05-16	—	—	—	—	—	—	—	15.1	—	—	19.0	37.5	0.80	—	—
WQ0364	1978-06-19	—	—	—	—	—	—	—	11.2	—	—	21.5	38.0	1.00	—	—
WQ0364	1978-07-24	—	—	—	—	—	—	—	12.0	—	—	22.0	40.0	0.90	—	—
WQ0364	1978-08-29	—	—	—	—	—	—	—	9.6	—	—	22.0	38.0	1.10	—	—
WQ0364	1978-09-26	—	—	—	—	—	—	—	10.2	—	—	48.5	76.0	1.10	—	—
WQ0364	1978-10-23	—	—	—	—	—	—	—	13.0	—	—	23.5	38.0	1.20	—	—
WQ0364	1978-11-13	—	—	—	—	—	—	—	—	—	—	23.0	40.5	1.00	—	—
WQ0364	1978-12-11	—	—	—	—	—	—	—	15.1	—	—	23.0	44.0	1.00	—	—
WQ0364	1979-01-29	—	—	—	—	—	—	—	15.1	—	—	24.0	45.0	1.30	—	—
WQ0364	1979-02-19	—	—	—	—	—	—	—	13.5	—	—	22.0	42.0	1.40	—	—
WQ0364	1979-03-20	—	—	—	—	—	—	—	14.2	—	—	31.0	47.0	1.10	—	—
WQ0364	1979-04-30	—	—	—	—	—	—	—	8.6	—	—	35.0	46.0	1.10	—	—
WQ0364	1979-05-07	—	—	—	—	—	—	—	9.9	—	—	26.5	45.0	2.10	—	—
WQ0364	1979-05-28	—	—	—	—	—	—	—	6.5	—	—	21.5	29.0	0.90	—	—
WQ0364	1979-06-25	—	—	—	—	—	—	—	9.5	—	—	20.0	36.5	1.10	—	—
WQ0364	1979-07-23	—	—	—	—	—	—	—	9.8	—	—	20.5	36.0	0.90	—	—
WQ0364	1979-08-27	—	—	—	—	—	—	—	10.4	—	—	20.0	36.5	1.40	—	—
WQ0364	1979-10-01	—	—	—	—	—	—	—	9.5	—	—	27.0	34.0	1.10	—	—
WQ0364	1979-10-23	—	—	—	—	—	—	—	11.6	—	—	—	—	1.00	—	—
WQ0364	1979-11-20	—	—	—	—	—	—	—	14.3	—	—	—	—	0.90	—	—
WQ0364	1979-12-13	—	—	—	—	—	—	—	13.1	—	—	—	—	1.00	—	—
WQ0364	1980-01-07	—	—	—	—	—	—	—	14.0	—	—	19.0	44.5	1.00	—	—
WQ0364	1980-02-04	—	—	—	—	—	—	—	8.3	—	—	22.0	49.0	1.10	—	—
WQ0364	1980-03-11	—	—	—	—	—	—	—	—	—	—	20.5	47.5	1.10	—	—
WQ0364	1980-04-17	—	—	—	—	—	—	—	11.5	—	—	19.0	43.5	1.00	—	—
WQ0364	1980-05-05	—	—	—	—	—	—	—	11.3	—	—	16.5	35.0	0.80	—	—
WQ0364	1980-06-23	—	—	—	—	—	—	—	8.7	—	—	19.0	38.5	0.90	—	—
WQ0364	1980-07-21	—	—	—	—	—	—	—	8.5	—	—	18.0	37.5	1.10	—	—
WQ0364	1980-08-18	—	—	—	—	—	—	—	8.7	—	—	22.0	36.5	1.10	—	—
WQ0364	1980-09-15	—	—	—	—	—	—	—	9.9	—	—	26.5	37.0	1.30	—	—
WQ0364	1980-10-21	—	—	—	—	—	—	—	12.9	—	—	19.0	37.5	1.00	—	—
WQ0364	1980-11-25	—	—	—	—	—	—	—	9.5	—	—	23.5	39.5	1.00	—	—
WQ0364	1980-12-15	—	—	—	—	—	—	—	15.0	—	—	18.5	41.0	0.90	—	—
WQ0364	1981-01-05	—	—	—	—	—	—	—	15.9	—	—	18.5	43.5	0.90	—	—
WQ0364	1981-02-10	—	—	—	—	—	—	—	14.6	—	—	22.5	42.0	1.00	—	—
WQ0364	1981-03-10	—	—	—	—	—	—	—	14.6	—	—	24.5	49.0	1.10	—	—
WQ0364	1981-04-13	—	—	—	—	—	—	—	12.8	—	—	37.0	41.5	1.00	—	—
WQ0364	1981-05-19	—	—	—	—	—	—	—	6.1	—	—	27.0	38.5	1.10	—	—
WQ0364	1981-06-15	—	—	—	—	—	—	—	9.6	—	—	19.5	36.5	1.10	—	—
WQ0364	1981-07-13	—	—	—	—	—	—	—	9.6	—	—	21.5	36.5	1.20	—	—
WQ0364	1981-08-18	—	—	—	—	—	—	—	9.8	—	—	20.0	34.0	1.00	—	—
WQ0364	1981-09-14	—	—	—	—	—	—	—	10.0	—	—	21.0	40.0	1.20	—	—
WQ0364	1981-10-19	—	—	—	—	—	—	—	11.9	—	—	35.0	42.0	1.40	—	—
WQ0364	1981-11-16	—	—	—	—	—	—	—	14.0	—	—	28.0	40.5	1.20	—	—
WQ0364	1981-12-07	—	—	—	—	—	—	—	12.2	—	—	21.5	44.0	1.20	—	—
WQ0364	1982-01-25	—	—	—	—	—	—	—	12.3	—	—	28.5	52.5	1.20	—	—
WQ0364	1982-02-23	—	—	—	—	—	—	—	12.0	—	—	23.0	48.0	1.30	—	—
WQ0364	1982-03-22	—	—	—	—	—	—	—	13.0	—	—	23.0	44.0	1.30	—	—
WQ0364	1982-04-20	—	—	—	—	—	—	—	11.3	—	—	24.0	42.0	1.10	—	—
WQ0364	1982-05-27	—	—	—	—	—	—	—	9.0	—	—	20.0	40.5	1.00	—	—
WQ0364	1982-07-15	—	—	—	—	—	—	—	8.4	—	—	21.5	37.0	1.10	—	—
WQ0364	1982-08-31	—	—	—	—	—	—	—	7.9	—	—	22.5	36.0	1.10	—	—
WQ0364	1982-09-28	—	—	—	—	—	—	—	8.9	—	—	—	—	1.20	—	—
WQ0364	1982-10-20	—	—	—	—	—	—	—	12.6	—	—	16.5	—	1.20	—	—
WQ0364	1982-11-24	—	—	—	—	—	—	—	11.8	—	—	18.5	39.5	1.10	—	—
WQ0364	1982-12-29	—	—	—	—	—	—	—	11.3	—	—	20.5	45.5	1.20	—	—
WQ0364	1983-02-22	—	—	—	—	—	—	—	13.4	—	—	22.5	48.0	1.50	—	—
WQ0364	1983-03-24	—	—	—	—	—	—	—	11.3	—	—	20.0	50.0	1.30	—	—
WQ0364	1983-04-18	—	—	—	—	—	—	—	12.6	—	—	19.5	49.5	1.40	—	—
WQ0364	1983-05-27	—	—	—	—	—	—	—	13.0	—	—	28.5	36.5	1.50	—	—
WQ0364	1983-06-22	—	—	—	—	—	—	—	9.5	—	—	20.5	33.5	1.10	—	—
WQ0364	1983-08-04	—	—	—	—	—	—	—	9.1	—	—	20.5	36.5	1.40	—	—
WQ0364	1983-08-31	—	—	—	—	—	—	—	9.1	—	—	18.5	38.5	1.20	—	—
WQ0364	1983-10-04	—	—	—	—	—	—	—	11.4	—	—	33.0	35.5	1.10	—	—
WQ0364	1983-11-02	—	—	—	—	—	—	—	13.4	—	—	32.0	36.0	1.30	—	—
WQ0364	1983-11-30	—	—	—	—	—	—	—	13.8	—	—	17.5	41.0	1.10	—	—
WQ0364	1983-12-20	—	—	—	—	—	—	—	14.5	—	—	21.0	44.5	1.10	—	—
WQ0364	1984-02-14	—	—	—	—	—	—	—	12.6	—	—	22.5	48.5	1.30	—	—
WQ0364	1984-03-20	—	—	—	—	—	—	—	13.4	—	—	21.0	50.5	1.20	—	—
WQ0364	1984-08-29	258.0	—	—	397	129	—	—	8.7	—	—	—	—	1.86	—	—

Appendix 6. (Continued).

Site	Sample Date	Nitrate-Nitrite Nitrogen mg/L	Total Ammonia Nitrogen mg/L	Total Phosphorus as P mg/L	Total Particulate Phosphorus mg/L	Total Dissolved Phosphorus mg/L	Ortho Phosphorus mg/L	Chlorophyll a ug/L	Arsenic Extractable mg/L	Arsenic Total mg/L	Cadmium Extractable or Total mg/L	Copper Extractable or Total mg/L	Lead Extractable or Total mg/L	Nickel Extractable or Total mg/L	Zinc Extractable or Total mg/L
Assiniboine Diversion est															
WQ0014	1971-04-22	0.60	—	0.120	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1972-04-27	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1972-05-24	< 0.10	—	0.100	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1973 No Flow														
WQ0014	1974-04-05	0.44	—	0.550	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1974-05-02	1.00	0.030	0.330	—	—	0.28	—	—	—	—	—	—	—	—
WQ0014	1974-06-04	0.06	0.070	0.230	—	—	0.10	—	—	—	—	—	—	—	—
WQ0014	1975-05-27	0.38	0.100	0.200	—	—	0.13	—	< 0.040	—	< 0.005	0.005	< 0.010	—	—
WQ0014	1976-05-04	0.02	0.050	0.110	—	—	0.11	—	< 0.040	—	< 0.005	0.005	< 0.010	—	—
WQ0014	1977 No Flow														
WQ0391	1978-04-18	1.10	—	0.500	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1979-04-25	2.30	—	1.200	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1979-04-30	1.50	—	0.600	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1979-05-17	0.23	—	0.360	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1979-06-20	0.14	—	0.230	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1980 No Flow														
WQ0391	1981 No Flow														
WQ0391	1982-04-27	0.43	0.090	0.320	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1983-04-21	0.29	0.140	0.380	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1983-05-19	0.18	0.040	0.180	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1984 No Flow														
WQ0014	No Spring Sampl														
WQ0014	1985-11-13	0.06	—	0.080	—	—	—	—	—	0.003	< 0.001	< 0.010	< 0.005	< 0.005	0.010
WQ0014	1986-04-09	0.84	0.180	0.380	0.100	0.280	—	—	—	0.007	< 0.001	< 0.010	0.007	0.006	0.030
WQ0014	May 86 No Flow														
WQ0014	1986-06-02	< 0.01	0.020	0.130	0.060	0.070	—	—	—	—	—	—	—	—	—
WQ0014	1987-04-06	1.20	0.360	—	—	—	—	—	—	0.019	< 0.001	0.020	0.007	0.006	0.060
WQ0014	1988 No Flow														
WQ0014	1989-04-04	—	—	—	—	—	—	—	—	0.003	< 0.001	0.030	< 0.005	0.008	0.020
WQ0014	1990 No Flow														
WQ0014	1991 No Flow														
WQ0014	1992-04-07	0.46	0.226	0.310	0.120	0.190	—	—	—	0.006	< 0.001	< 0.010	0.005	< 0.010	0.010
WQ0014	1992-05-04	0.48	0.021	0.207	0.112	0.096	—	—	—	0.004	< 0.001	< 0.010	0.002	< 0.005	< 0.010
WQ0014	1993 Aug. Flow														
WQ0014	1993-08-09	< 0.01	< 0.020	0.107	0.078	0.029	—	—	—	0.007	< 0.001	< 0.010	< 0.002	0.007	< 0.010
WQ0014	1994-07-05	< 0.01	< 0.020	0.190	0.073	0.117	—	—	—	0.008	< 0.001	0.010	< 0.002	< 0.005	< 0.010
WQ0014	1994-08-09	< 0.01	< 0.020	0.171	0.096	0.075	—	—	—	0.007	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0014	1994-09-06	< 0.01	< 0.020	0.193	0.079	0.114	—	—	—	0.006	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0014	1995-04-05	0.93	0.320	0.371	0.270	0.101	—	—	—	0.004	< 0.001	< 0.010	< 0.002	0.005	0.020
WQ0014	1995-05-01	0.21	0.101	0.509	0.076	0.433	—	—	—	0.007	< 0.001	0.010	0.005	0.020	0.030
WQ0014	1996-04-02	0.53	0.064	0.186	0.109	0.076	—	—	—	0.004	< 0.001	< 0.010	< 0.002	< 0.005	0.010
WQ0014	1996-05-06	0.22	0.040	0.306	0.107	0.198	—	—	—	—	—	—	—	—	—
WQ0014	1996-06-10	0.22	< 0.020	0.176	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1997-04-10	1.20	0.247	0.499	0.380	0.119	—	—	—	0.004	< 0.0005	< 0.005	0.002	0.008	0.010
WQ0014	1997-05-05	0.09	0.041	0.227	0.092	0.135	—	—	—	—	—	—	—	—	—
WQ0014	1998-04-08	1.23	0.250	0.954	0.269	0.685	—	7.0	—	0.013	0.001	0.029	0.010	0.039	0.090
WQ0014	1999-04-07	1.42	0.640	0.427	0.259	0.168	—	4.0	—	0.008	< 0.0002	0.010	0.004	0.014	0.030
WQ0014	1999-04-13	1.36	0.220	0.248	0.167	0.081	—	—	—	0.008	0.000	0.014	0.007	0.018	0.050
WQ0014	1999-05-03	0.01	0.030	0.191	0.067	0.124	—	7.0	—	—	—	—	—	—	—
WQ0014	1999-06-01	0.09	0.030	0.345	0.122	0.223	—	1.0	—	—	—	—	—	—	—
WQ0014	2000 No Flow														
WQ0014	2001-04-11	1.00	0.450	1.030	0.940	0.092	—	21.6	—	0.007	0.000	0.015	0.008	0.018	0.043
WQ0014	2001-05-07	0.31	< 0.02	0.184	0.068	0.116	—	19.1	—	—	—	—	—	—	—
WQ0014	2001-07-04	0.61	0.040	0.197	0.086	0.111	—	23.7	—	0.004	NA	0.004	0.001	0.004	0.006
Whitemud River															
WQ0197	1973-05-24	< 0.10	0.070	0.020	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1973-07-26	0.20	0.170	0.240	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1973-10-04	0.20	—	0.060	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1974-01-22	0.37	—	0.030	—	—	—	—	—	—	< 0.01	0.010	0.020	0.030	0.040
WQ0197	1974-01-31	0.43	—	0.020	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1974-04-22	3.50	0.190	0.290	—	—	0.10	—	—	—	< 0.010	< 0.01	0.010	—	0.020
WQ0197	1974-08-26	< 0.01	0.030	0.070	—	—	< 0.02	—	—	—	< 0.010	< 0.01	0.010	—	0.010
WQ0197	1974-10-16	0.01	< 0.020	0.090	—	—	0.03	—	—	—	< 0.010	< 0.01	0.020	—	0.010
WQ0197	1975-02-11	0.26	0.250	0.050	—	—	0.03	—	—	—	< 0.005	0.005	< 0.01	—	0.007
WQ0197	1975-06-03	0.13	0.030	0.100	—	—	< 0.02	—	< 0.040	—	< 0.005	< 0.005	< 0.01	—	—
WQ0197	1975-09-03	0.24	0.040	0.120	—	—	0.05	—	< 0.040	—	< 0.005	0.010	< 0.01	—	—
WQ0197	1975-11-24	0.25	0.080	< 0.020	—	—	< 0.02	—	< 0.040	—	< 0.005	< 0.005	< 0.01	—	—
WQ0197	1976-02-11	0.25	0.370	0.050	—	—	< 0.02	—	< 0.040	—	< 0.005	< 0.005	< 0.01	—	—
WQ0197	1976-04-29	0.06	0.130	0.060	—	—	0.04	—	< 0.040	—	< 0.005	< 0.005	< 0.01	—	—
WQ0197	1976-07-05	0.01	0.020	0.090	—	—	0.02	—	< 0.040	—	< 0.005	0.005	< 0.01	—	—
WQ0197	1976-09-14	0.01	0.030	0.100	—	—	0.05	—	< 0.040	—	< 0.005	< 0.005	< 0.01	—	—
WQ0197	1977-01-05	0.12	0.670	0.030	—	—	< 0.02	—	< 0.040	—	< 0.005	0.010	< 0.01	—	—
WQ0197	1977-04-28	< 0.01	0.020	0.080	—	—	< 0.02	—	0.007	—	< 0.005	0.005	0.005	—	—
WQ0197	1977-07-14	0.16	0.060	0.210	—	—	0.12	—	0.006	—	< 0.005	0.005	< 0.005	—	—
WQ0197	1977-10-12	0.12	< 0.020	0.050	—	—	0.04	—	< 0.005	—	< 0.005	0.005	0.005	—	—
WQ0197	1978-01-24	0.46	—	0.050	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-02-14	0.44	—	0.040	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-03-29	0.85	—	0.070	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-04-18	0.37	—	0.240	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-05-16	0.14	—	0.060	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-06-20	0.04	—	0.090	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-07-25	0.02	—	0.090	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-08-24	0.25	—	0.060	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-09-21	0.02	—	0.070	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-10-16	< 0.01	—	0.040	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-11-09	0.01	—	0.040	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-12-12	0.05	—	0.040	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-01-18	0.39	—	0.040	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-02-15	0.48	—	0.030	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-03-15	0.44	—	0.040	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-04-25	1.50	—	0.400	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-04-30	1.20	—	0.260	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-05-17	0.06	—	0.100	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-06-20	0.02	—	0.090	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-07-19	0.05	—	0.060	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-08-22	0.01	—	0.050	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-09-24	< 0.01	—	0.180	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-10-16	< 0.01	—	0.020	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-11-08	< 0.01	—	0.040	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-12-03	< 0.01	—	0.030	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-01-15	0.20	—	0.030	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-02-18	0.39	—	0.027	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-03-20	0.49	—	0.025	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-04-09	0.31	0.070	0.180	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-04-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Appendix 6. (Continued).

Site	Sample Date	Nitrate-Nitrite Nitrogen mg/L	Total Ammonia Nitrogen mg/L	Total Phosphorus as P mg/L	Total Particulate Phosphorus mg/L	Total Dissolved Phosphorus mg/L	Ortho Phosphorus mg/L	Chlorophyll a ug/L	Arsenic Extractable mg/L	Arsenic Total mg/L	Cadmium Extractable or Total mg/L	Copper Extractable or Total mg/L	Lead Extractable or Total mg/L	Nickel Extractable or Total mg/L	Zinc Extractable or Total mg/L
WQ0197	1980-05-08	0.01	---	0.070	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-06-17	< 0.01	---	0.070	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-07-17	< 0.01	---	0.160	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-08-14	< 0.01	---	0.090	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-09-10	< 0.01	---	0.100	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-10-21	< 0.01	---	0.070	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-11-12	< 0.01	---	0.030	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-12-18	0.09	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-01-07	0.14	---	0.130	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-02-12	0.20	---	0.050	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-03-12	0.52	---	0.140	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-04-15	< 0.01	---	0.060	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-05-21	0.01	---	0.070	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-06-17	0.14	---	0.130	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-07-15	< 0.01	---	0.130	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-08-20	< 0.01	---	0.080	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-09-16	< 0.01	---	0.100	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-10-21	< 0.01	---	0.060	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-11-18	0.02	---	0.030	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-12-09	< 0.01	---	0.040	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-01-20	0.18	---	0.060	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-02-22	0.39	---	0.080	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-03-18	1.10	---	0.120	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-04-27	0.14	---	0.150	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-05-18	0.01	---	0.080	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-06-14	< 0.01	---	0.080	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-07-19	0.08	---	0.160	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-08-25	< 0.01	---	0.110	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-09-20	< 0.01	---	0.060	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-10-06	< 0.01	---	0.100	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-11-08	< 0.01	---	0.040	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-12-14	0.13	---	0.050	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-01-25	0.23	---	0.040	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-03-03	0.38	---	0.030	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-03-28	0.52	---	0.050	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-04-27	0.38	---	0.360	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-05-16	0.03	---	0.060	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-06-29	< 0.01	---	0.090	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-07-20	0.03	---	0.090	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-09-06	< 0.01	---	0.080	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-09-26	< 0.01	---	0.040	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-10-24	0.01	---	0.060	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-11-15	< 0.01	---	0.060	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-12-06	0.04	---	0.040	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1984-01-18	0.08	---	0.050	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1986-10-14	< 0.01	< 0.020	0.045	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1986-11-25	0.08	0.125	0.080	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-01-12	0.21	0.240	0.045	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-02-17	0.39	0.160	0.050	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-03-31	0.88	0.235	0.290	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-05-12	0.03	0.050	0.060	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-06-22	0.06	0.110	0.115	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-07-29	< 0.01	0.040	0.080	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-09-03	< 0.01	0.020	0.075	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-10-22	< 0.01	< 0.020	0.060	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-12-02	0.02	0.050	0.065	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-01-11	0.24	0.255	0.050	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-03-01	0.05	1.280	0.140	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-04-13	0.12	0.140	0.130	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-05-24	< 0.01	0.025	0.063	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-06-21	0.03	0.025	0.135	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-08-16	< 0.01	0.020	0.100	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-09-28	0.01	< 0.020	0.055	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-11-07	0.01	< 0.020	0.045	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-12-12	0.02	0.050	0.035	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-02-06	0.11	0.485	0.045	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-03-06	0.23	0.480	0.040	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-05-01	< 0.01	0.025	0.075	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-06-05	< 0.01	< 0.020	0.100	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-08-01	< 0.01	< 0.020	0.225	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-09-05	< 0.01	< 0.020	0.095	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-11-06	0.01	0.020	0.075	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-12-11	0.03	0.060	0.060	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-02-06	0.19	0.920	0.055	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-03-05	0.38	0.420	0.045	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-05-07	0.01	0.050	0.100	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-06-04	0.01	< 0.020	0.085	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-08-07	< 0.01	0.020	0.100	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-09-04	< 0.01	0.020	0.080	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-11-05	< 0.01	< 0.020	0.045	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-12-03	0.01	< 0.020	0.045	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-02-04	0.17	0.405	0.055	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-03-04	0.36	0.265	0.043	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-05-06	0.02	< 0.020	0.065	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-06-03	< 0.01	0.020	0.105	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-08-06	< 0.01	0.020	0.100	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-09-09	< 0.01	0.030	0.100	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1992-06-24	< 0.01	0.036	0.051	0.035	0.016	---	---	---	0.005	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0197	1992-09-30	< 0.01	< 0.020	0.047	0.034	0.013	---	---	---	0.008	< 0.001	0.010	< 0.002	< 0.005	< 0.010
WQ0197	1993-01-04	0.30	0.400	0.060	0.041	0.019	---	---	---	0.003	< 0.001	< 0.010	< 0.002	< 0.005	0.010
WQ0197	1993-04-15	0.10	0.040	0.124	0.029	0.095	---	---	---	0.005	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0197	1993-06-23	< 0.01	< 0.020	0.108	0.063	0.045	---	---	---	0.016	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0197	1993-09-29	< 0.01	< 0.020	0.057	0.045	0.012	---	---	---	0.004	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0197	1994-01-04	0.12	0.422	0.063	0.045	0.018	---	---	---	0.003	< 0.001	< 0.010	< 0.002	< 0.005	0.010
WQ0197	1994-04-05	0.06	0.035	0.083	0.055	0.028	---	---	---	0.003	< 0.001	< 0.010	< 0.002	< 0.005	0.010
WQ0197	1994-07-04	< 0.01	0.022	0.151	0.110	0.041	---	---	---	0.020	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0197	1994-10-03	0.01	< 0.020	0.070	0.055	0.015	---	---	---	0.013	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0197	1995-01-03	0.49	0.284	0.055	0.045	0.010	---	---	---	0.003	< 0.001	0.010	< 0.002	< 0.005	0.020
WQ0197	1995-04-04	1.05	0.351	0.338	0.270	0.068	---	---	---	0.009	< 0.001	< 0.010	< 0.002	< 0.005	0.010
WQ0197	1995-07-04	< 0.01	< 0.020	0.070	0.030	0.040	---	---	---	0.007	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0197	1995-10-03	< 0.01	< 0.020	0.050	0.030	0.020	---	---	---	0.007	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0197	1996-01-02	0.37	0.249	0.060	0.048	0.012	---	---	---	0.004	< 0.001	< 0.010	< 0.002	< 0.005	0.010
WQ0197	1996-04-01	0.77	0.104	0.067	0.055	0.012	---	---	---	0.004	< 0.001	< 0.010	< 0.002	< 0.005	0.010
WQ0197	1996-05-13	0.02	0.045	0.096	0.059	---	---	7.5	---	---	---	---	---	---	---
WQ0197	1996-06-10	0.11	0.036	0.224	0.106	---	---	11.0	---	---	---	---	---	---	---
WQ0197	1996-07-08	0.09	0.036	0.121	0.104	0.017	---	---	---	0.005	< 0.001	< 0.01	< 0.001	< 0.005	< 0.010

Appendix 6. (Continued).

Site	Sample Date	Nitrate-Nitrite Nitrogen mg/L	Total Ammonia Nitrogen mg/L	Total Phosphorus as P mg/L	Total Particulate Phosphorus mg/L	Total Dissolved Phosphorus mg/L	Ortho Phosphorus mg/L	Chlorophyll a ug/L	Arsenic Extractable mg/L	Arsenic Total mg/L	Cadmium Extractable or Total mg/L	Copper Extractable or Total mg/L	Lead Extractable or Total mg/L	Nickel Extractable or Total mg/L	Zinc Extractable or Total mg/L
WQ0197	1996-07-15	0.07	0.020	0.065	0.050	—	—	1.0	—	—	—	—	—	—	—
WQ0197	1996-08-12	0.08	< 0.020	0.076	0.060	—	—	1.5	—	—	—	—	—	—	—
WQ0197	1996-09-29	0.02	0.022	0.070	0.058	0.012	—	—	—	0.005	< 0.001	< 0.005	< 0.002	< 0.005	< 0.010
WQ0197	1997-01-06	0.35	0.415	0.124	0.114	0.010	—	—	—	0.005	< 0.0005	< 0.005	< 0.001	< 0.002	< 0.010
WQ0197	1997-04-09	0.90	0.181	0.191	0.146	0.045	—	—	—	0.008	< 0.0005	< 0.005	0.002	0.003	< 0.010
WQ0197	1997-05-13	0.04	0.032	0.066	0.030	—	—	6.5	—	—	—	—	—	—	—
WQ0197	1997-06-10	0.01	< 0.02	0.067	0.037	—	—	< 1.0	—	—	—	—	—	—	—
WQ0197	1997-07-07	0.01	< 0.02	0.082	0.049	0.033	—	—	—	0.014	< 0.0005	0.012	< 0.001	< 0.002	—
WQ0197	1997-07-15	< 0.01	< 0.02	0.082	0.057	—	—	4.0	—	—	—	—	—	—	—
WQ0197	1997-08-19	0.01	< 0.02	0.067	0.043	—	—	1.0	—	—	—	—	—	—	—
WQ0197	1997-10-06	< 0.01	0.050	0.046	0.030	0.016	—	—	—	0.010	< 0.0005	0.010	0.001	0.003	< 0.010
WQ0197	1998-01-05	0.54	0.120	0.053	0.042	0.011	—	—	—	0.003	< 0.0005	< 0.005	< 0.001	0.003	0.010
WQ0197	1998-04-07	1.16	0.230	0.333	0.184	0.149	—	—	—	0.008	< 0.0005	0.006	0.002	0.007	0.010
WQ0197	1998-05-20	< 0.01	< 0.02	0.099	0.038	—	—	6.0	—	—	—	—	—	—	—
WQ0197	1998-06-25	0.79	0.080	0.213	0.142	—	—	4.0	—	—	—	—	—	—	—
WQ0197	1998-07-06	0.22	0.030	0.200	0.167	0.033	—	—	—	0.017	< 0.0002	0.003	0.001	0.010	0.010
WQ0197	1998-07-29	< 0.01	< 0.01	0.211	0.098	—	—	8.0	—	—	—	—	—	—	—
WQ0197	1998-08-20	< 0.01	< 0.01	0.266	0.108	—	—	7.0	—	—	—	—	—	—	—
WQ0197	1998-10-04	< 0.01	0.020	0.065	0.050	0.015	—	—	—	0.013	< 0.0002	0.001	< 0.0005	0.005	0.010
WQ0197	1999-04-06	0.79	0.370	0.227	0.125	0.102	—	—	—	0.006	< 0.0002	0.003	0.002	0.005	< 0.020
WQ0197	1999-05-20	0.12	0.020	0.193	0.057	—	—	2.0	—	—	—	—	—	—	—
WQ0197	1999-06-21	0.17	0.030	0.241	0.092	—	—	2.0	—	—	—	—	—	—	—
WQ0197	1999-07-07	< 0.01	0.010	0.062	0.046	0.016	—	—	—	0.003	< 0.0002	0.001	< 0.0005	0.003	< 0.020
WQ0197	1999-07-21	0.17	< 0.01	0.107	0.084	0.023	—	2.0	—	—	—	—	—	—	—
WQ0197	1999-08-24	0.04	0.030	0.109	0.062	0.047	—	3.0	—	—	—	—	—	—	—
WQ0197	1999-10-04	< 0.01	0.010	0.040	0.035	0.005	—	—	—	0.007	< 0.0002	< 0.001	< 0.0005	0.002	< 0.020
WQ0197	2000-01-10	0.43	0.480	0.096	0.071	0.025	—	—	—	0.006	< 0.0002	0.001	< 0.0005	< 0.002	< 0.020
WQ0197	2000-04-03	0.67	0.030	0.111	0.035	0.076	—	—	—	0.006	< 0.0002	0.003	0.001	0.003	< 0.020
WQ0197	2000-05-15	0.06	< 0.01	0.086	0.036	0.050	—	4.0	—	—	—	—	—	—	—
WQ0197	2000-06-19	0.07	0.010	0.148	0.050	0.098	—	6.0	—	—	—	—	—	—	—
WQ0197	2000-07-04	0.14	0.050	0.116	0.080	0.036	—	5.0	—	0.011	< 0.0002	0.002	< 0.0005	0.002	< 0.020
WQ0197	2000-07-18	0.31	0.030	0.216	0.183	0.033	—	< 1.0	—	—	—	—	—	—	—
WQ0197	2000-08-16	0.03	0.040	0.121	0.095	0.026	—	2.0	—	—	—	—	—	—	—
WQ0197	2000-10-02	< 0.01	0.010	0.064	0.044	0.020	—	2.0	—	0.011	< 0.0002	0.002	0.001	0.006	< 0.020
WQ0197	2001-01-10	0.36	0.390	0.079	0.059	0.020	—	—	—	0.004	< 0.0002	0.002	0.002	< 0.002	0.020
WQ0197	2001-04-10	1.80	0.160	0.530	0.269	0.261	—	—	—	0.005	0.000	0.003	0.001	0.003	0.013
WQ0197	2001-05-15	< 0.02	0.040	0.107	0.038	0.069	—	24.6	—	—	—	—	—	—	—
WQ0197	2001-06-12	0.03	0.050	0.127	0.080	0.047	—	6.6	—	—	—	—	—	—	—
WQ0197	2001-07-03	0.89	0.080	0.221	0.072	0.149	—	5.3	—	0.006	NA	0.003	0.001	0.004	0.004
WQ0197	2001-07-16	0.12	0.05	0.237	0.160	0.077	—	2.7	—	—	—	—	—	—	—
WQ0197	2001-08-14	0.16	0.080	0.165	0.083	0.082	—	6.2	—	—	—	—	—	—	—
WQ0197	2001-10-01	0.02	0.100	0.042	0.021	0.021	—	1.5	—	0.005	NA	0.001	< 0.0002	0.001	0.003
Waterhen River															
WQ0561	1981-08-18	< 0.01	—	0.030	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-09-14	< 0.01	—	0.020	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-10-19	< 0.01	—	0.050	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-11-16	0.01	—	0.030	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-12-07	0.01	—	0.020	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-01-25	0.06	—	0.030	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-02-23	< 0.01	—	0.080	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-03-22	< 0.01	—	0.150	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-05-26	< 0.01	—	0.030	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-07-14	< 0.01	—	0.040	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-08-31	< 0.01	—	0.040	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-09-30	< 0.01	—	0.020	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-10-28	0.01	—	0.040	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-11-24	0.01	—	0.020	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-12-29	0.02	—	0.020	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-05-25	< 0.01	—	0.080	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-06-22	< 0.01	—	0.020	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-08-04	< 0.01	—	0.040	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-08-31	< 0.01	—	0.030	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-10-04	0.01	—	0.020	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-11-02	< 0.01	—	0.020	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-11-30	0.01	—	0.050	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-12-20	0.03	—	0.020	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1984-02-14	0.04	—	0.010	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1984-03-20	0.03	—	0.015	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1987-07-08	0.02	< 0.020	0.030	0.010	0.020	—	—	—	0.002	< 0.001	< 0.01	< 0.005	< 0.005	0.030
WQ0561	1987-11-04	0.01	0.060	0.040	0.010	0.030	—	—	—	0.002	< 0.001	0.040	< 0.005	< 0.005	< 0.010
WQ0561	1988-05-04	0.02	0.040	0.025	< 0.0100	> 0.0150	—	—	—	< 0.001	< 0.001	0.100	< 0.005	< 0.005	0.070
WQ0561	1988-07-04	< 0.01	< 0.020	0.030	0.008	0.020	—	—	—	0.004	< 0.001	< 0.010	< 0.005	0.007	< 0.010
WQ0561	1988-10-03	< 0.01	0.020	0.035	0.010	> 0.0050	—	—	—	< 0.001	< 0.001	0.020	0.008	< 0.005	< 0.010
WQ0561	1989-04-10	0.05	0.150	0.015	< 0.0100	0.015	—	—	—	0.002	< 0.001	< 0.010	< 0.050	< 0.005	< 0.010
WQ0561	1989-07-10	< 0.01	0.025	0.040	0.020	0.023	—	—	—	0.002	< 0.001	0.020	< 0.005	< 0.005	< 0.010
WQ0561	1989-10-10	< 0.01	0.020	0.025	< 0.0100	> 0.0150	—	—	—	0.002	< 0.001	< 0.010	< 0.005	< 0.005	< 0.010
WQ0561	1990-04-09	< 0.01	0.510	0.045	0.015	0.030	—	—	—	0.002	< 0.001	< 0.010	< 0.005	< 0.005	< 0.010
WQ0561	1990-06-25	< 0.01	0.020	0.025	0.015	0.010	—	—	—	0.001	< 0.001	< 0.010	0.002	< 0.005	0.010
WQ0561	1990-10-09	< 0.01	< 0.020	0.020	0.010	0.010	—	—	—	0.001	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0561	1991-04-15	< 0.01	0.415	0.040	< 0.0100	> 0.0300	—	—	—	0.002	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0561	1991-06-24	0.01	< 0.020	0.034	0.011	0.023	—	—	—	< 0.001	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0561	1991-09-30	< 0.01	0.060	0.030	0.010	0.020	—	—	—	0.001	< 0.001	< 0.010	< 0.0030	< 0.005	< 0.010
WQ0561	1992-04-13	< 0.01	0.871	0.060	0.015	0.045	—	—	—	0.001	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0561	1992-06-22	< 0.01	0.021	0.022	< 0.0100	< 0.0100	—	—	—	0.001	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0561	1992-09-28	< 0.01	0.021	< 0.0100	< 0.0100	< 0.0100	—	—	—	< 0.001	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0561	1993-04-13	0.01	0.655	0.036	0.013	0.023	—	—	—	< 0.001	< 0.001	0.030	< 0.002	< 0.005	< 0.010
WQ0561	1993-06-21	0.01	< 0.020	0.029	0.011	0.018	—	—	—	0.001	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0561	1993-09-27	< 0.01	< 0.020	0.028	0.007	0.021	—	—	—	< 0.001	< 0.001	< 0.010	< 0.002	0.006	< 0.010
WQ0561	1994-04-11	0.01	0.143	0.018	0.009	0.009	—	—	—	< 0.001	< 0.001	< 0.010	< 0.002	0.005	0.010
WQ0561	1994-06-27	< 0.01	< 0.020	0.025	0.010	0.015	—	—	—	< 0.001	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0561	1994-08-29	< 0.01	< 0.020	0.027	0.010	—	—	5.0	—	< 0.001	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0561	1994-09-26	< 0.01	< 0.020	0.023	0.010	0.013	—	—	—	< 0.001	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0561	1995-04-18	0.03	0.048	0.020	0.008	0.012	—	—	—	< 0.001	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0561	1995-07-24	< 0.01	0.020	0.021	0.020	0.001	—	—	—	< 0.001	< 0.001	< 0.010	< 0.002	< 0.005	0.010
WQ0561	1995-08-23	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1995-10-10	< 0.01	0.040	0.012	< 0.0010	< 0.0110	—	—	—	0.001	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0561	1996-05-13	0.02	0.025	0.036	0.021	0.015	—	—	—	0.001	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010
WQ0561	1996-06-24	0.05	0.036	0.035	0.014	0.021	—	—	—	< 0.001	< 0.001	0.020	< 0.001	< 0.005	< 0.010
WQ0561	1996-09-30	0.01	0.022	0.045	0.014	0.031	—	—	—	< 0.001	< 0.001	< 0.005	< 0.002	< 0.005	< 0.010
WQ0561	1997-04-22	0.10	0.064	0.023	0.019	0.004	—	—	—	< 0.001	< 0.0005	< 0.005	0.001	< 0.002	< 0.010
WQ0561	1997-06-26	< 0.01	< 0.02	0.037	0.020	0.017	—	—	—	0.001	< 0.0005	0.012	< 0.001	< 0.002	—
WQ0561	1997-10-21	< 0.01	< 0.02	0.028	0.015	0.013	—	—	—	< 0.001	< 0.0005	0.010	< 0.001	< 0.002	< 0.010
WQ0561	1998-04-27	0.02	< 0.02	0.028	0.006	0.022	—	—	—	0.001	< 0.0005	< 0.005	0.001	< 0.002	< 0.010
WQ0561	1998-07-06	< 0.01	0.010	0.027	0.013	0.014	—	—	—	0.001	< 0.0002	0.001	< 0.0005	0.002	< 0.010
WQ0561	1998-10-14	< 0.01	0.040	0.029	0.013	0.016	—	—	—	0.002	< 0.0002	< 0.001	< 0.0005	< 0.002	0.020
WQ0561	1999-04-19	< 0.01	0.020	0.018	0.010	0.008	—	—	—	0.002	< 0.0002	< 0.001	< 0.0005	< 0.002	< 0.020

Appendix 6. (Continued).

Site	Sample Date	Nitrate-Nitrite Nitrogen mg/L	Total Ammonia Nitrogen mg/L	Total Phosphorus as P mg/L	Total Particulate Phosphorus mg/L	Total Dissolved Phosphorus mg/L	Ortho Phosphorus mg/L	Chlorophyll a ug/L	Arsenic Extractable mg/L	Arsenic Total mg/L	Cadmium Extractable or Total mg/L	Copper Extractable or Total mg/L	Lead Extractable or Total mg/L	Nickel Extractable or Total mg/L	Zinc Extractable or Total mg/L
WQ0561	1999-07-06	< 0.01	0.010	0.022	0.013	0.009	---	---	---	< 0.0005	< 0.0002	< 0.001	< 0.0005	< 0.002	< 0.020
WQ0561	1999-09-20	< 0.01	0.010	0.026	0.012	0.014	---	---	---	0.004	< 0.0002	0.001	< 0.0005	< 0.002	< 0.020
WQ0561	2000-04-18	< 0.01	0.010	0.023	0.009	0.014	---	---	---	0.002	< 0.0002	0.001	< 0.0005	0.002	< 0.020
WQ0561	2000-06-27	0.01	0.010	0.026	0.015	0.011	---	---	---	0.001	< 0.0002	0.002	0.001	< 0.002	0.030
WQ0561	2000-10-04	0.01	0.020	0.025	0.015	0.010	---	---	---	0.004	< 0.0002	0.001	0.001	< 0.002	< 0.020
WQ0561	2001-04-22	0.06	0.780	0.039	0.019	0.020	---	---	---	0.002	NA	0.000	< 0.0001	0.001	0.001
WQ0561	2001-07-16	< 0.02	0.090	0.029	0.021	0.008	---	4.0	---	0.002	NA	0.001	< 0.0001	0.001	< 0.001
WQ0561	2001-09-25	0.02	0.130	0.023	0.015	0.008	---	1.8	---	0.002	NA	0.002	< 0.0002	0.001	0.001
Fairford River															
WQ0364	1978-01-16	0.04	---	< 0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-02-21	0.31	---	< 0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-03-20	0.09	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-04-24	0.36	---	0.120	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-05-16	0.13	---	0.060	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-06-19	0.06	---	0.040	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-07-24	< 0.01	---	0.014	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-08-29	< 0.01	---	0.040	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-09-26	0.14	---	0.060	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-10-23	< 0.01	---	0.060	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-11-13	< 0.01	---	0.060	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-12-11	< 0.01	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-01-29	0.02	---	0.040	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-02-19	0.17	---	0.030	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-03-20	0.06	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-04-30	0.21	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-05-07	0.23	---	0.200	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-05-28	0.07	---	< 0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-06-25	< 0.01	---	0.040	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-07-23	< 0.01	---	0.030	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-08-27	0.01	---	0.040	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-10-01	< 0.01	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-10-23	< 0.01	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-11-20	< 0.01	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-12-13	< 0.01	---	0.050	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-01-07	0.02	---	0.040	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-02-04	< 0.01	---	< 0.0010	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-03-11	0.08	---	0.010	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-04-17	0.10	---	0.013	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-05-05	0.04	---	0.007	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-06-23	< 0.01	---	0.006	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-07-21	< 0.01	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-08-18	< 0.01	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-09-15	< 0.01	---	0.040	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-10-21	< 0.01	---	0.040	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-11-25	0.01	---	0.010	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-12-15	< 0.01	---	0.010	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-01-05	< 0.01	---	0.060	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-02-10	0.01	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-03-10	0.01	---	0.014	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-04-13	0.01	---	0.030	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-05-19	0.01	---	0.030	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-06-15	< 0.01	---	0.050	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-07-13	< 0.01	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-08-18	< 0.01	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-09-14	< 0.01	---	0.030	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-10-19	0.01	---	0.050	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-11-16	0.01	---	0.030	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-12-07	0.02	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-01-25	0.03	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-02-23	0.03	---	0.030	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-03-22	0.07	---	0.010	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-04-20	0.05	---	0.120	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-05-27	0.02	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-07-15	< 0.01	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-08-31	< 0.01	---	0.040	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-09-28	< 0.01	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-10-20	< 0.01	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-11-24	0.01	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-12-29	0.01	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-02-22	0.02	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-03-24	0.03	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-04-18	0.03	---	0.030	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-05-27	0.02	---	0.010	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-06-22	< 0.01	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-08-04	< 0.01	---	0.040	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-08-31	< 0.01	---	0.030	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-10-04	< 0.01	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-11-02	0.01	---	0.020	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-11-30	0.02	---	0.050	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-12-20	0.03	---	0.050	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1984-02-14	0.05	---	0.010	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1984-03-20	0.05	---	0.011	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1994-08-29	< 0.01	< 0.020	0.048	0.008	---	---	4.0	---	0.001	< 0.001	< 0.010	< 0.002	< 0.005	< 0.010

Appendix 6. (Continued).

Site	Sample Date	Chromium Hexavalent mg/L	Chromium Total mg/L	Aluminum Extractable mg/L	Aluminum Total mg/L	Aluminum Dissolved mg/L	Antimony Total mg/L	Barium Total mg/L	Beryllium Total mg/L	Bismuth Total mg/L	Cobalt Total mg/L	Cesium Total mg/L	Lithium Total mg/L	Molybdenum Total mg/L	Phosphate Total as PO_4 mg/L	Rubidium Total mg/L
Assiniboine Diversion est.																
WQ0014	1971-04-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1972-04-27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1972-05-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1973 No Flow															
WQ0014	1974-04-05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1974-05-02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1974-06-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1975-05-27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1976-05-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1977 No Flow															
WQ0391	1978-04-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1979-04-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1979-04-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1979-05-17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1979-06-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1980 No Flow															
WQ0391	1981 No Flow															
WQ0391	1982-04-27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1983-04-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1983-05-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1984 No Flow															
WQ0014	No Spring Sampl															
WQ0014	1985-11-13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1986-04-09	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	May 86 No Flow															
WQ0014	1986-06-02	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1987-04-06	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1988 No Flow															
WQ0014	1989-04-04	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1990 No Flow															
WQ0014	1991 No Flow															
WQ0014	1992-04-07	< 0.02	—	< 0.010	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1992-05-04	< 0.02	—	0.439	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1993 Aug. Flow															
WQ0014	1993-08-09	< 0.02	—	0.150	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1994-07-05	< 0.02	—	0.694	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1994-08-09	< 0.02	—	0.191	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1994-09-06	< 0.02	—	0.260	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1995-04-05	< 0.02	—	0.640	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1995-05-01	< 0.02	—	0.965	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1996-04-02	< 0.02	—	0.867	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1996-05-06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1996-06-10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1997-04-10	< 0.02	—	0.406	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1997-05-05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1998-04-08	< 0.02	—	2.820	30.000	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1999-04-07	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1999-04-13	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1999-05-03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1999-06-01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	2000 No Flow															
WQ0014	2001-04-11	< 0.05	0.0094	—	4.900	0.360	0.0003	0.221	0.0003	< 0.0002	0.006	0.0014	0.032	0.0019	1.82	0.0140
WQ0014	2001-05-07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	2001-07-04	< 0.02	0.0008	—	0.340	0.190	0.0006	0.085	< 0.0002	< 0.0002	0.0006	0.0001	0.065	0.0024	0.49	0.0028
Whitemud River																
WQ0197	1973-05-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1973-07-26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1973-10-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1974-01-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1974-01-31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1974-04-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1974-08-26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1974-10-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1975-02-11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1975-06-03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1975-09-03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1975-11-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1976-02-11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1976-04-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1976-07-05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1976-09-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1977-01-05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1977-04-28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1977-07-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1977-10-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-01-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-02-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-03-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-04-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-05-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-06-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-07-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-08-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-09-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-10-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-11-09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-12-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-01-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-02-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-03-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-04-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-04-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-05-17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-06-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-07-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-08-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-09-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-10-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-11-08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-12-03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-01-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-02-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-03-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-04-09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-04-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Appendix 6. (Continued).

Site	Sample Date	Chromium Hexavalent mg/L	Chromium Total mg/L	Aluminum Extractable mg/L	Aluminum Total mg/L	Aluminum Dissolved mg/L	Antimony Total mg/L	Barium Total mg/L	Beryllium Total mg/L	Bismuth Total mg/L	Cobalt Total mg/L	Cesium Total mg/L	Lithium Total mg/L	Molybdenum Total mg/L	Phosphate Total as PO_4 mg/L	Rubidium Total mg/L
WQ0197	1980-05-08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-06-17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-07-17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-08-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-09-10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-10-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-11-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-12-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1981-01-07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1981-02-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1981-03-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1981-04-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1981-05-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1981-06-17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1981-07-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1981-08-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1981-09-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1981-10-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1981-11-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1981-12-09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1982-01-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1982-02-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1982-03-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1982-04-27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1982-05-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1982-06-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1982-07-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1982-08-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1982-09-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1982-10-06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1982-11-08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1982-12-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1983-01-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1983-03-03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1983-03-28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1983-04-27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1983-05-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1983-06-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1983-07-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1983-09-06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1983-09-26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1983-10-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1983-11-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1983-12-06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1984-01-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1986-10-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1986-11-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1987-01-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1987-02-17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1987-03-31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1987-05-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1987-06-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1987-07-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1987-09-03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1987-10-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1987-12-02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1988-01-11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1988-03-01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1988-04-13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1988-05-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1988-06-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1988-08-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1988-09-28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1988-11-07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1988-12-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1989-02-06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1989-03-06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1989-05-01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1989-06-05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1989-08-01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1989-09-05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1989-11-06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1989-12-11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1990-02-06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1990-03-05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1990-05-07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1990-06-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1990-08-07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1990-09-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1990-11-05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1990-12-03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1991-02-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1991-03-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1991-05-06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1991-06-03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1991-08-06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1991-09-09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1992-06-24	< 0.02	—	0.168	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1992-09-30	< 0.02	—	0.038	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1993-01-04	< 0.02	—	0.282	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1993-04-15	< 0.02	—	0.250	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1993-06-23	< 0.02	—	0.304	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1993-09-29	< 0.02	—	0.086	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1994-01-04	< 0.02	—	0.336	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1994-04-05	< 0.02	—	0.086	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1994-07-04	< 0.02	—	0.350	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1994-10-03	< 0.02	—	0.114	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1995-01-03	< 0.02	—	0.153	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1995-04-04	< 0.02	—	0.458	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1995-07-04	< 0.02	—	0.172	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1995-10-03	< 0.02	—	0.340	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1996-01-02	< 0.02	—	0.094	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1996-04-01	< 0.02	—	0.193	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1996-05-13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1996-06-10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1996-07-08	< 0.02	—	0.226	—	—	—	—	—	—	—	—	—	—	—	—

Appendix 6. (Continued).

Site	Sample Date	Chromium Hexavalent mg/L	Chromium Total mg/L	Aluminum Extractable mg/L	Aluminum Total mg/L	Aluminum Dissolved mg/L	Antimony Total mg/L	Barium Total mg/L	Beryllium Total mg/L	Bismuth Total mg/L	Cobalt Total mg/L	Cesium Total mg/L	Lithium Total mg/L	Molybdenum Total mg/L	Phosphate Total as PO_4 mg/L	Rubidium Total mg/L
WQ0197	1996-07-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1996-08-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1996-09-29	< 0.02	—	0.255	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-01-06	< 0.02	—	0.356	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-04-09	< 0.02	—	0.354	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-05-13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-06-10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-07-07	< 0.02	—	0.420	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-07-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-08-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-10-06	< 0.02	—	0.270	0.450	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-01-05	< 0.02	—	0.100	0.160	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-04-07	< 0.02	—	0.790	7.800	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-05-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-06-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-07-06	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-07-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-08-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-10-04	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-04-06	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-05-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-06-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-07-07	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-07-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-08-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-10-04	< 0.01	0.0020	—	0.150	—	0.0010	0.145	< 0.0010	0.0001	0.0002	< 0.0001	0.041	0.0011	—	0.0029
WQ0197	2000-01-10	< 0.01	< 0.0020	—	0.230	—	< 0.0010	0.226	< 0.0010	< 0.0001	0.0002	< 0.0001	0.066	0.0015	—	0.0033
WQ0197	2000-04-03	< 0.01	< 0.0020	—	1.690	—	< 0.0010	0.127	< 0.0010	0.0003	0.0007	0.0002	0.026	0.0017	—	0.0044
WQ0197	2000-05-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-06-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-07-04	< 0.01	< 0.0020	—	0.930	—	< 0.0010	0.184	< 0.0010	< 0.0001	0.0005	< 0.0001	0.041	0.0013	—	0.0033
WQ0197	2000-07-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-08-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-10-02	< 0.01	0.0050	—	0.760	—	0.0010	0.127	< 0.0010	< 0.0001	0.0007	< 0.0001	0.042	0.0014	—	0.0052
WQ0197	2001-01-10	< 0.01	< 0.0020	—	0.200	—	< 0.0010	0.199	< 0.0010	< 0.0001	0.0003	< 0.0001	0.047	0.0009	—	0.0025
WQ0197	2001-04-10	< 0.05	0.0016	—	0.850	0.062	< 0.0002	0.124	< 0.0002	< 0.0002	0.0011	0.0002	0.018	0.0009	1.42	0.0038
WQ0197	2001-05-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-06-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-07-03	< 0.02	0.0007	—	0.310	0.160	0.0005	0.135	< 0.0002	< 0.0002	0.0006	< 0.0001	0.040	0.0022	0.52	0.0028
WQ0197	2001-07-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-08-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-10-01	< 0.02	0.0004	—	0.110	0.025	0.0005	0.117	< 0.0002	0.0002	0.0002	< 0.0001	0.037	0.0013	0.11	0.0022
Waterhen River															—	
WQ0561	1981-08-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-09-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-10-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-11-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-12-07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-01-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-02-23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-03-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-05-26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-07-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-08-31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-09-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-10-28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-11-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-12-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-05-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-06-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-08-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-08-31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-10-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-11-02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-11-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-12-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1984-02-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1984-03-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1987-07-08	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1987-11-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1988-05-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1988-07-04	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1988-10-03	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1989-04-10	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1989-07-10	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1989-10-10	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1990-04-09	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1990-06-25	< 0.02	—	0.040	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1990-10-09	< 0.02	—	< 0.010	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1991-04-15	< 0.02	—	< 0.010	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1991-06-24	< 0.02	—	0.011	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1991-09-30	< 0.02	—	0.028	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1992-04-13	< 0.02	—	0.046	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1992-06-22	< 0.02	—	< 0.010	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1992-09-28	< 0.02	—	0.018	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1993-04-13	< 0.02	—	0.011	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1993-06-21	< 0.02	—	0.012	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1993-09-27	< 0.02	—	0.038	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1994-04-11	< 0.02	—	0.019	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1994-06-27	< 0.02	—	< 0.010	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1994-08-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1994-09-26	< 0.02	—	0.010	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1995-04-18	< 0.02	—	< 0.010	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1995-07-24	< 0.02	—	0.053	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1995-08-23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1995-10-10	< 0.02	—	0.015	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1996-05-13	< 0.02	—	0.019	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1996-06-24	< 0.02	—	0.022	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1996-09-30	< 0.02	—	0.018	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1997-04-22	< 0.02	—	< 0.010	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1997-06-26	< 0.02	—	0.020	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1997-10-21	< 0.02	—	< 0.010	0.030	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1998-04-27	< 0.02	—	0.020	0.030	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1998-07-06	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1998-10-14	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1999-04-19	< 0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Appendix 6. (Continued).

Site	Sample Date	Chromium Hexavalent mg/L	Chromium Total mg/L	Aluminum Extractable mg/L	Aluminum Total mg/L	Aluminum Dissolved mg/L	Antimony Total mg/L	Barium Total mg/L	Beryllium Total mg/L	Bismuth Total mg/L	Cobalt Total mg/L	Cesium Total mg/L	Lithium Total mg/L	Molybdenum Total mg/L	Phosphate Total as PO_4 mg/L	Rubidium Total mg/L
WQ0561	1999-07-06	< 0.02	—	—	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1999-09-20	< 0.02	< 0.0020	—	0.030	---	0.0010	0.0342	< 0.0010	< 0.0001	< 0.0002	< 0.0001	0.034	0.0020	—	0.0045
WQ0561	2000-04-18	< 0.01	< 0.0020	—	0.070	—	< 0.0010	0.0373	< 0.0010	0.0002	0.0002	< 0.0001	0.030	0.0023	—	0.0039
WQ0561	2000-06-27	< 0.01	< 0.0020	—	0.050	---	< 0.0010	0.0327	< 0.0010	< 0.0001	< 0.0002	< 0.0001	0.030	0.0020	—	0.0044
WQ0561	2000-10-04	< 0.01	< 0.0020	—	0.150	---	0.0010	0.0337	< 0.0010	< 0.0001	0.0002	< 0.0001	0.030	0.0020	—	0.0053
WQ0561	2001-04-22	< 0.05	0.0010	—	0.003	< 0.001	< 0.0002	0.053	< 0.0002	< 0.0002	< 0.0002	< 0.0001	0.031	0.0015	0.08	0.0039
WQ0561	2001-07-16	< 0.02	0.0007	—	0.015	0.010	0.0006	0.037	< 0.0002	0.0002	< 0.0002	< 0.0001	0.031	0.0023	0.09	0.0038
WQ0561	2001-09-25	< 0.02	0.0003	—	0.021	0.012	0.0005	0.026	< 0.0002	< 0.0002	< 0.0002	< 0.0001	0.033	0.0023	0.09	0.0042
Fairford River															—	
WQ0364	1978-01-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-02-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-03-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-04-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-05-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-06-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-07-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-08-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-09-26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-10-23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-11-13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-12-11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-01-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-02-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-03-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-04-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-05-07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-05-28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-06-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-07-23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-08-27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-10-01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-10-23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-11-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-12-13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-01-07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-02-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-03-11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-04-17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-05-05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-06-23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-07-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-08-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-09-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-10-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-11-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-12-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-01-05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-02-10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-03-10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-04-13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-05-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-06-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-07-13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-08-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-09-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-10-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-11-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-12-07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-01-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-02-23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-03-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-04-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-05-27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-07-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-08-31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-09-28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-10-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-11-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-12-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-02-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-03-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-04-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-05-27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-06-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-08-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-08-31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-10-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-11-02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-11-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-12-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1984-02-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1984-03-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1994-08-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Appendix 6. (Continued).

Site	Sample Date	Selenium Total mg/L	Silicon Total mg/L	Silver Total mg/L	Strontium Total mg/L	Thallium Total mg/L	Tin Total mg/L	Tellurium Total mg/L	Thorium Total mg/L	Titanium Total mg/L	Uranium Total mg/L	Vanadium Total mg/L	Tungsten Total mg/L	Zirconium Total mg/L	2, 4,5-T ug/L	2,4,5-TP Silvex ug/L	2,4-D ug/L	2,4-DB ug/L
Assiniboine Diversion est																		
WQ0014	1971-04-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1972-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1972-05-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1973 No Flow																	
WQ0014	1974-04-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1974-05-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1974-06-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1975-05-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1976-05-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1977 No Flow																	
WQ0391	1978-04-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1979-04-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1979-04-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1979-05-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1979-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1980 No Flow																	
WQ0391	1981 No Flow																	
WQ0391	1982-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1983-04-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1983-05-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1984 No Flow																	
WQ0014	No Spring Sampl																	
WQ0014	1985-11-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.10	---
WQ0014	1986-04-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.30	---
WQ0014	May 86 No Flow																	
WQ0014	1986-06-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1987-04-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	---
WQ0014	1988 No Flow																	
WQ0014	1989-04-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	---
WQ0014	1990 No Flow																	
WQ0014	1991 No Flow																	
WQ0014	1992-04-07	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.01	< 0.01	0.08	< 0.20
WQ0014	1992-05-04	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.01	< 0.01	0.07	< 0.20
WQ0014	1993 Aug. Flow																	
WQ0014	1993-08-09	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.01	< 0.01	< 0.05	< 0.20
WQ0014	1994-07-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0014	1994-08-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0014	1994-09-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0014	1995-04-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0014	1995-05-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.17	< 0.20
WQ0014	1996-04-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0014	1996-05-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1996-06-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1997-04-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0014	1997-05-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1998-04-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.06	< 0.05
WQ0014	1999-04-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.19	< 0.05
WQ0014	1999-04-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.05
WQ0014	1999-05-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1999-06-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	2000 No Flow																	
WQ0014	2001-04-11	< 0.0004	32.9	NA	0.180	0.00024	0.0012	< 0.0002	0.0022	0.1140	0.0035	0.0210	---	0.007	---	< 0.05	< 0.05	< 0.05
WQ0014	2001-05-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	2001-07-04	0.0005	16.3	0.00003	0.299	0.00003	0.0013	< 0.0002	0.0003	0.0120	0.0035	0.0039	---	0.007	---	< 0.05	< 0.05	< 0.05
Whitemud River			---						---									
WQ0197	1973-05-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1973-07-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1973-10-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-01-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-01-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-04-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-08-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-10-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1975-02-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1975-09-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1975-11-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1976-02-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1976-04-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1976-07-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1976-09-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1977-01-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1977-04-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1977-07-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1977-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-01-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-02-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-03-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-04-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-05-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-07-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-08-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-09-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-10-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-11-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-12-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-01-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-02-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-03-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-04-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-04-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-05-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-07-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-08-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-09-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-10-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-11-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-12-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-01-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-02-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-04-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-04-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 6. (Continued).

Site	Sample Date	Selenium Total mg/L	Silicon Total mg/L	Silver Total mg/L	Strontium Total mg/L	Thallium Total mg/L	Tin Total mg/L	Tellurium Total mg/L	Thorium Total mg/L	Titanium Total mg/L	Uranium Total mg/L	Vanadium Total mg/L	Tungsten Total mg/L	Zirconium Total mg/L	2,4,5-T ug/L	2,4,5-TP Silvex ug/L	2,4-D ug/L	2,4-DB ug/L
WQ0197	1980-05-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-06-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-07-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-08-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-09-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-10-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-11-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-12-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-01-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-02-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-04-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-05-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-06-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-07-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-08-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-09-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-10-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-11-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-12-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-01-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-02-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-03-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-05-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-06-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-07-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-08-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-09-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-10-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-11-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-12-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-01-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-03-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-03-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-05-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-06-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-07-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-09-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-10-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-11-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-12-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1984-01-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1986-10-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1986-11-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-01-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-02-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-03-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-05-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-06-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-07-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-09-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-10-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-12-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-01-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-03-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-04-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-05-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-06-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-09-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-11-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-12-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-02-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-03-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-05-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-06-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-08-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-09-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-11-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-12-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-02-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-03-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-05-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-06-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-08-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-09-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-11-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-12-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-02-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-03-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-05-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-08-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-09-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1992-06-24	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.01	< 0.01	< 0.05	< 0.20
WQ0197	1992-09-30	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.01	< 0.01	< 0.05	< 0.20
WQ0197	1993-01-04	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.01	< 0.01	< 0.05	< 0.20
WQ0197	1993-04-15	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.01	< 0.01	< 0.05	< 0.20
WQ0197	1993-06-23	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.01	< 0.01	0.99	< 0.20
WQ0197	1993-09-29	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.01	< 0.01	< 0.05	< 0.20
WQ0197	1994-01-04	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.01	< 0.01	0.08	< 0.20
WQ0197	1994-04-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0197	1994-07-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.17	< 0.20
WQ0197	1994-10-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0197	1995-01-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0197	1995-04-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0197	1995-07-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0197	1995-10-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0197	1996-01-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0197	1996-04-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0197	1996-05-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1996-06-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1996-07-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.08	< 0.20

Appendix 6. (Continued).

Site	Sample Date	Selenium Total mg/L	Silicon Total mg/L	Silver Total mg/L	Strontium Total mg/L	Thallium Total mg/L	Tin Total mg/L	Tellurium Total mg/L	Thorium Total mg/L	Titanium Total mg/L	Uranium Total mg/L	Vanadium Total mg/L	Tungsten Total mg/L	Zirconium Total mg/L	2, 4,5-T ug/L	2,4,5-TP Silvex ug/L	2,4-D ug/L	2,4-DB ug/L
WQ0197	1996-07-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1996-08-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1996-09-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0197	1997-01-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.05	< 0.20
WQ0197	1997-04-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0197	1997-05-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1997-06-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1997-07-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.17	< 0.05
WQ0197	1997-07-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1997-08-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1997-10-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.05
WQ0197	1998-01-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.05
WQ0197	1998-04-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.05
WQ0197	1998-05-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1998-06-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1998-07-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.05
WQ0197	1998-07-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1998-08-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1998-10-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.05
WQ0197	1999-04-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.05
WQ0197	1999-05-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1999-06-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1999-07-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.07	< 0.05
WQ0197	1999-07-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1999-08-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1999-10-04	0.0030	---	0.00340	0.256	< 0.00010	< 0.000	0.0020	---	0.0057	0.0010	< 0.0010	< 0.0002	0.0004	---	---	< 0.05	< 0.05
WQ0197	2000-01-10	< 0.0020	---	0.00080	0.395	< 0.00010	0.0006	< 0.0010	---	0.0103	0.0026	0.0020	< 0.0002	0.0011	---	---	< 0.05	< 0.05
WQ0197	2000-04-03	0.0030	---	0.00180	0.207	< 0.00010	0.0009	< 0.0010	---	0.0443	0.0032	0.0050	0.0004	0.0028	---	---	< 0.05	< 0.05
WQ0197	2000-05-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	2000-06-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	2000-07-04	< 0.0020	---	< 0.0004	0.319	< 0.00010	0.0012	< 0.0010	---	0.0217	0.0019	0.0040	< 0.0002	0.0012	---	---	0.35	< 0.05
WQ0197	2000-07-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	2000-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	2000-10-02	< 0.0020	---	< 0.0004	0.247	< 0.00010	< 0.000	< 0.0010	---	0.0366	0.0020	0.0020	< 0.0002	0.0006	---	---	< 0.05	< 0.05
WQ0197	2001-01-10	< 0.0020	---	< 0.0004	0.382	< 0.00010	< 0.000	< 0.0010	---	0.0062	0.0028	0.0020	< 0.0002	0.0004	---	---	< 0.05	< 0.05
WQ0197	2001-04-10	< 0.0004	15.5	0.00006	0.158	0.00002	0.0004	< 0.0002	0.0002	0.0300	0.0016	0.0034	---	< 0.002	---	< 0.05	< 0.05	< 0.05
WQ0197	2001-05-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	2001-06-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	2001-07-03	0.0006	19.2	0.00007	0.243	0.00002	0.0014	< 0.0002	0.0002	0.0130	0.0039	0.0040	---	0.009	---	< 0.05	< 0.5	< 0.05
WQ0197	2001-07-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	2001-08-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	2001-10-01	< 0.0004	14.0	0.00019	0.255	NA	< 0.000	0.0004	0.0004	0.0039	0.0014	0.0013	---	< 0.002	---	< 0.05	< 0.05	< 0.05
Waterhen River			---						---									
WQ0561	1981-08-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1981-09-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1981-10-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1981-11-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1981-12-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-01-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-02-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-03-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-05-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-07-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-08-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-09-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-10-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-11-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-12-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1983-05-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1983-06-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1983-08-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1983-08-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1983-10-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1983-11-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1983-11-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1983-12-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1984-02-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1984-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1987-07-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	---
WQ0561	1987-11-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	---
WQ0561	1988-05-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	---
WQ0561	1988-07-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.06	---
WQ0561	1988-10-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	---
WQ0561	1989-04-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.16	---
WQ0561	1989-07-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	---
WQ0561	1989-10-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	---
WQ0561	1990-04-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.05	---
WQ0561	1990-06-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	---
WQ0561	1990-10-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	---
WQ0561	1991-04-15	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.01	---	< 0.05	---
WQ0561	1991-06-24	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.01	---	< 0.05	---
WQ0561	1991-09-30	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.01	---	0.11	---
WQ0561	1992-04-13	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.01	0.06	< 0.05	< 0.20
WQ0561	1992-06-22	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.01	0.01	0.13	< 0.20
WQ0561	1992-09-28	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.01	< 0.01	< 0.05	< 0.20
WQ0561	1993-04-13	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.01	0.01	< 0.05	< 0.20
WQ0561	1993-06-21	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.01	< 0.01	< 0.05	< 0.20
WQ0561	1993-09-27	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.01	< 0.01	< 0.05	< 0.20
WQ0561	1994-04-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0561	1994-06-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0561	1994-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1994-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0561	1995-04-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0561	1995-07-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0561	1995-08-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0561	1995-10-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0561	1996-05-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0561	1996-06-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0561	1996-09-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.08	< 0.20
WQ0561	1997-04-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.20
WQ0561	1997-06-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.05
WQ0561	1997-10-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.05
WQ0561	1998-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.05
WQ0561	1998-07-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.05
WQ0561	1998-10-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.05	< 0.05
WQ0561	1999-04-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 6. (Continued).

Site	Sample Date	Selenium Total mg/L	Silicon Total mg/L	Silver Total mg/L	Strontium Total mg/L	Thallium Total mg/L	Tin Total mg/L	Tellurium Total mg/L	Thorium Total mg/L	Titanium Total mg/L	Uranium Total mg/L	Vanadium Total mg/L	Tungsten Total mg/L	Zirconium Total mg/L	2,4,5-T ug/L	2,4,5-TP Silvex ug/L	2,4-D ug/L	2,4-DB ug/L
WQ0561	1999-07-06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.05	< 0.05
WQ0561	1999-09-20	0.0030	—	0.00100	0.278	< 0.00010	0.0006	< 0.0010	—	0.0018	0.0012	0.0010	< 0.0002	< 0.0002	—	—	< 0.05	< 0.05
WQ0561	2000-04-18	0.0050	—	< 0.0004	0.309	0.0002	0.0013	< 0.0010	—	0.0033	0.0014	0.0020	0.0003	0.0010	—	—	< 0.05	< 0.05
WQ0561	2000-06-27	< 0.0020	—	< 0.0004	0.293	< 0.00010	0.0017	< 0.0010	—	0.0016	0.0012	0.0010	< 0.0002	< 0.0002	—	—	< 0.05	< 0.05
WQ0561	2000-10-04	0.0030	—	< 0.0004	0.297	< 0.00010	0.0008	< 0.0010	—	0.0127	0.0014	0.0010	< 0.0002	< 0.0002	—	—	< 0.05	< 0.05
WQ0561	2001-04-22	< 0.0004	11.4	NA	0.375	NA	< 0.000	< 0.0002	< 0.0001	0.0003	0.0009	0.0018	—	< 0.002	—	< 0.05	< 0.05	< 0.05
WQ0561	2001-07-16	< 0.0004	8.3	NA	0.267	NA	0.0009	0.0003	0.0002	0.0009	0.0013	0.0012	—	< 0.002	—	< 0.05	< 0.05	< 0.05
WQ0561	2001-09-25	< 0.0004	7.0	NA	0.238	NA	< 0.000	< 0.0002	0.0002	0.0011	0.0014	0.0012	—	< 0.002	—	< 0.05	< 0.05	< 0.05
Fairford River			—						—									
WQ0364	1978-01-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-02-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-03-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-04-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-05-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-06-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-07-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-08-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-09-26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-10-23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-11-13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1978-12-11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-01-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-02-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-03-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-04-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-05-07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-05-28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-06-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-07-23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-08-27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-10-01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-10-23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-11-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1979-12-13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-01-07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-02-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-03-11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-04-17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-05-05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-06-23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-07-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-08-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-09-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-10-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-11-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1980-12-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-01-05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-02-10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-03-10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-04-13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-05-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-06-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-07-13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-08-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-09-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-10-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-11-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1981-12-07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-01-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-02-23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-03-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-04-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-05-27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-07-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-08-31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-09-28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-10-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-11-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1982-12-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-02-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-03-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-04-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-05-27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-06-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-08-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-08-31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-10-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-11-02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-11-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1983-12-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1984-02-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1984-03-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0364	1994-08-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Appendix 6. (Continued).

Site	Sample Date	Alachlor	Aldrin	Ampa	Atrazine	Azinphos Methyl	Bromacil	Bromoxynil	Carbofuran	Chlordane (Cis)	Chlordane (Trans)	Chlorothalonil	DDD	DDE	DDT	Deltamethrin	Diazinon
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Assiniboine Diversion est																	
WQ0014	1971-04-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1972-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1972-05-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1973 No Flow																
WQ0014	1974-04-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1974-05-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1974-06-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1975-05-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1976-05-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1977 No Flow																
WQ0391	1978-04-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1979-04-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1979-04-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1979-05-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1979-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1980 No Flow																
WQ0391	1981 No Flow																
WQ0391	1982-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1983-04-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1983-05-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1984 No Flow																
WQ0014	No Spring Sampl																
WQ0014	1985-11-13	---	---	---	---	---	---	< 0.10	---	---	---	---	---	---	---	---	---
WQ0014	1986-04-09	---	---	---	---	---	---	< 0.10	---	---	---	---	---	---	---	---	---
WQ0014	May 86 No Flow																
WQ0014	1986-06-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1987-04-06	---	---	---	---	---	---	< 0.01	---	---	---	---	---	---	---	---	---
WQ0014	1988 No Flow																
WQ0014	1989-04-04	---	---	---	---	---	---	< 0.01	---	---	---	---	---	---	---	---	---
WQ0014	1990 No Flow																
WQ0014	1991 No Flow																
WQ0014	1992-04-07	< 2.0	< 0.01	---	< 0.5	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	---
WQ0014	1992-05-04	< 2.0	< 0.01	---	< 0.5	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	---
WQ0014	1993 Aug. Flow																
WQ0014	1993-08-09	< 2.0	< 0.01	---	< 0.5	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	< 0.50
WQ0014	1994-07-05	< 2.0	---	---	< 0.5	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	---	---	---	---	---
WQ0014	1994-08-09	< 2.0	---	---	< 0.5	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	---	---	---	---	---
WQ0014	1994-09-06	< 2.0	---	---	< 0.5	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	---	---	---	---	---
WQ0014	1995-04-05	< 2.0	---	---	< 0.5	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	---	---	---	---	---
WQ0014	1995-05-01	< 2.0	---	---	< 0.5	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	---	---	---	---	---
WQ0014	1996-04-02	< 2.0	---	---	< 0.5	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	< 5.00	---	---	---	< 0.04	---
WQ0014	1996-05-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1996-06-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1997-04-10	< 2.0	---	---	< 0.5	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	< 5.00	---	---	---	< 0.04	---
WQ0014	1997-05-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1998-04-08	< 0.2	---	---	< 0.1	---	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	---	---	---	< 0.04	< 0.1
WQ0014	1999-04-07	< 0.2	---	---	< 0.1	---	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	---	---	---	< 0.04	< 0.1
WQ0014	1999-04-13	< 0.2	---	---	< 0.1	---	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	---	---	---	< 0.04	< 0.1
WQ0014	1999-05-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1999-06-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	2000 No Flow																
WQ0014	2001-04-11	< 0.2	---	---	< 0.1	< 5.0	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.08	---	---	---	< 0.04	< 0.03
WQ0014	2001-05-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	2001-07-04	< 0.2	---	< 35	< 0.1	< 1.0	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.08	---	---	---	< 0.04	< 0.03
Whitemud River																	
WQ0197	1973-05-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1973-07-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1973-10-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-01-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-01-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-04-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-08-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-10-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1975-02-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1975-09-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1975-11-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1976-02-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1976-04-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1976-07-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1976-09-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1977-01-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1977-04-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1977-07-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1977-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-01-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-02-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-03-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-04-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-05-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-07-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-08-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-09-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-10-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-11-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-12-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-01-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-02-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-03-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-04-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-04-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-05-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-07-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-08-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-09-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-10-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-11-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-12-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-01-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-02-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-04-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-04-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 6. (Continued).

Site	Sample Date	Alachlor ug/L	Aldrin ug/L	Ampa ug/L	Atrazine ug/L	Azinphos Methyl ug/L	Bromacil ug/L	Bromoxynil ug/L	Carbofuran ug/L	Chlordane (Cis) ug/L	Chlordane (Trans) ug/L	Chlorothalonil ug/L	DDD ug/L	DDE ug/L	DDT ug/L	Deltamethrin ug/L	Diazinon ug/L
WQ0197	1980-05-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-06-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-07-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-08-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-09-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-10-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-11-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-12-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-01-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-02-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-04-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-05-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-06-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-07-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-08-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-09-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-10-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-11-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-12-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-01-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-02-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-03-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-05-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-06-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-07-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-08-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-09-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-10-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-11-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-12-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-01-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-03-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-03-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-05-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-06-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-07-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-09-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-10-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-11-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-12-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1984-01-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1986-10-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1986-11-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-01-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-02-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-03-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-05-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-06-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-07-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-09-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-10-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-12-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-01-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-03-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-04-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-05-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-06-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-09-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-11-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-12-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-02-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-03-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-05-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-06-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-08-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-09-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-11-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-12-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-02-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-03-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-05-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-06-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-08-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-09-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-11-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-12-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-02-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-03-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-05-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-08-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-09-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1992-06-24	< 2.0	< 0.01	---	< 0.5	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	---
WQ0197	1992-09-30	< 2.0	< 0.01	---	< 0.5	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	< 0.50
WQ0197	1993-01-04	< 2.0	< 0.01	---	< 0.5	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	< 0.50
WQ0197	1993-04-15	< 2.0	< 0.01	---	< 0.5	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	< 0.50
WQ0197	1993-06-23	< 2.0	< 0.01	---	< 0.5	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	< 0.50
WQ0197	1993-09-29	< 2.0	< 0.01	---	< 0.5	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	< 0.50
WQ0197	1994-01-04	< 2.0	< 0.01	---	< 0.5	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	< 0.50
WQ0197	1994-04-05	< 2.0	< 0.01	---	< 0.5	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	< 0.03	< 0.01	< 0.03	---	< 0.50
WQ0197	1994-07-04	< 2.0	---	---	< 0.5	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	---	---	---	---	---
WQ0197	1994-10-03	< 2.0	---	---	< 0.5	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	---	---	---	---	---
WQ0197	1995-01-03	< 2.0	---	---	< 0.5	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	---	---	---	---	---
WQ0197	1995-04-04	< 2.0	---	---	< 0.5	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	---	---	---	---	---
WQ0197	1995-07-04	< 2.0	---	---	< 0.5	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	---	---	---	---	---
WQ0197	1995-10-03	< 2.0	---	---	< 0.5	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	---	---	---	< 0.04	---
WQ0197	1996-01-02	< 2.0	---	---	< 0.5	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	---	---	---	---	< 0.04	---
WQ0197	1996-04-01	< 2.0	---	---	< 0.5	---	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	< 5.00	---	---	---	< 0.04	---
WQ0197	1996-05-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1996-06-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1996-07-08	< 2.0	---	---	< 0.5	---	< 1.0	0.01	< 2.0	< 0.01	< 0.01	< 5.00	---	---	---	< 0.04	---

Appendix 6. (Continued).

Site	Sample Date	Alachlor	Aldrin	Ampa	Atrazine	Azinphos Methyl	Bromacil	Bromoxynil	Carbofuran	Chlordane (Cis)	Chlordane (Trans)	Chlorothalonil	DDD	DDE	DDT	Deltamethrin	Diazinon
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
WQ0197	1996-07-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1996-08-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1996-09-29	< 2.0	—	—	< 0.5	—	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	< 5.00	—	—	—	< 0.04	—
WQ0197	1997-01-06	< 2.0	—	—	< 0.5	—	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	< 5.00	—	—	—	< 0.04	—
WQ0197	1997-04-09	< 2.0	—	—	< 0.5	—	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	< 5.00	—	—	—	< 0.04	—
WQ0197	1997-05-13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-06-10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-07-07	< 0.2	—	—	< 0.1	—	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	—	—	—	< 0.04	< 0.1
WQ0197	1997-07-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-08-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-10-06	< 0.2	—	—	< 0.1	—	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	—	—	—	< 0.04	< 0.1
WQ0197	1998-01-05	< 0.2	—	—	< 0.1	—	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	—	—	—	< 0.04	< 0.1
WQ0197	1998-04-07	< 0.2	—	—	< 0.1	—	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	—	—	—	< 0.04	< 0.1
WQ0197	1998-05-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-06-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-07-06	< 0.2	—	—	< 0.1	—	< 0.2	0.06	< 0.2	< 0.01	< 0.01	< 0.50	—	—	—	< 0.04	< 0.1
WQ0197	1998-07-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-08-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-10-04	< 0.2	—	—	< 0.1	—	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	—	—	—	< 0.04	< 0.1
WQ0197	1999-04-06	< 0.2	—	—	< 0.1	—	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	—	—	—	< 0.04	< 0.1
WQ0197	1999-05-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-06-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-07-07	< 0.2	—	—	< 0.1	—	< 0.2	< 0.02	< 0.2	< 0.01	< 0.03	< 0.50	—	—	—	< 0.04	< 0.1
WQ0197	1999-07-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-08-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-10-04	< 0.2	—	—	< 0.1	—	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	—	—	—	< 0.04	< 0.1
WQ0197	2000-01-10	< 0.2	—	< 5.000	< 0.1	—	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	—	—	—	< 0.04	< 0.1
WQ0197	2000-04-03	< 0.2	—	< 0.005	< 0.1	—	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	—	—	—	< 0.04	< 0.1
WQ0197	2000-05-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-06-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-07-04	< 0.2	—	< 0.005	< 0.1	—	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	—	—	—	< 0.04	< 0.1
WQ0197	2000-07-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-08-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-10-02	< 0.2	—	< 0.005	< 0.1	—	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	—	—	—	< 0.04	< 0.1
WQ0197	2001-01-10	< 0.2	—	< 0.005	< 0.1	—	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	—	—	—	< 0.04	< 0.1
WQ0197	2001-04-10	< 0.2	—	—	< 0.1	< 5.0	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.06	—	—	—	< 0.04	< 0.03
WQ0197	2001-05-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-06-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-07-03	< 0.2	—	< 35	< 0.1	< 1.0	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.06	—	—	—	< 0.04	< 0.03
WQ0197	2001-07-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-08-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-10-01	< 0.2	—	< 35	< 0.1	< 1.0	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.06	—	—	—	< 0.04	< 0.03
Waterhen River																	
WQ0561	1981-08-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-09-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-10-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-11-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-12-07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-01-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-02-23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-03-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-05-26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-07-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-08-31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-09-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-10-28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-11-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-12-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-05-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-06-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-08-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-08-31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-10-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-11-02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-11-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-12-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1984-02-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1984-03-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1987-07-08	—	—	—	—	—	—	< 0.01	—	—	—	—	—	—	—	—	—
WQ0561	1987-11-04	—	—	—	—	—	—	< 0.01	—	—	—	—	—	—	—	—	—
WQ0561	1988-05-04	—	—	—	—	—	—	< 0.01	—	—	—	—	—	—	—	—	—
WQ0561	1988-07-04	—	—	—	—	—	—	< 0.01	—	—	—	—	—	—	—	—	—
WQ0561	1988-10-03	—	—	—	—	—	—	< 0.01	—	—	—	—	—	—	—	—	—
WQ0561	1989-04-10	—	—	—	—	—	—	< 0.01	—	—	—	—	—	—	—	—	—
WQ0561	1989-07-10	—	—	—	—	—	—	< 0.01	—	—	—	—	—	—	—	—	—
WQ0561	1989-10-10	—	—	—	—	—	—	< 0.01	—	—	—	—	—	—	—	—	—
WQ0561	1990-04-09	—	—	—	< 0.5	—	< 1.0	< 0.01	—	—	—	—	—	—	—	—	—
WQ0561	1990-06-25	—	—	—	< 0.5	—	< 1.0	< 0.01	—	—	—	—	—	—	—	—	—
WQ0561	1990-10-09	—	—	—	< 0.5	—	< 1.0	< 0.01	—	—	—	—	—	—	—	—	—
WQ0561	1991-04-15	—	—	—	< 0.5	—	< 1.0	< 0.01	—	—	—	—	—	—	—	—	—
WQ0561	1991-06-24	—	—	—	< 0.5	—	< 1.0	< 0.01	—	—	—	—	—	—	—	—	—
WQ0561	1991-09-30	—	—	—	< 0.5	—	< 1.0	< 0.01	—	—	—	—	—	—	—	—	—
WQ0561	1992-04-13	< 2.0	< 0.01	—	< 0.5	—	< 1.0	0.01	< 2.0	< 0.01	< 0.01	—	< 0.03	< 0.01	< 0.03	—	—
WQ0561	1992-08-22	< 2.0	< 0.01	—	< 0.5	—	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	—	< 0.03	< 0.01	< 0.03	—	—
WQ0561	1992-09-28	< 2.0	< 0.01	—	< 0.5	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	—	< 0.03	< 0.01	< 0.03	—	< 0.50
WQ0561	1993-04-13	< 2.0	< 0.01	—	< 0.5	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	—	< 0.03	< 0.01	< 0.03	—	< 0.50
WQ0561	1993-06-21	< 2.0	< 0.01	—	< 0.5	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	—	< 0.03	< 0.01	< 0.03	—	< 0.50
WQ0561	1993-09-27	< 2.0	< 0.01	—	< 0.5	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	—	< 0.03	< 0.01	< 0.03	—	< 0.50
WQ0561	1994-04-11	< 2.0	< 0.01	—	< 0.5	< 1.5	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	—	< 0.03	< 0.01	< 0.03	—	< 0.50
WQ0561	1994-06-27	< 2.0	—	—	< 0.5	—	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	—	—	—	—	—	—
WQ0561	1994-08-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1994-09-26	< 2.0	—	—	< 0.5	—	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	—	—	—	—	—	—
WQ0561	1995-04-18	< 2.0	—	—	< 0.5	—	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	—	—	—	—	—	—
WQ0561	1995-07-24	< 2.0	—	—	< 0.5	—	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	—	—	—	—	—	—
WQ0561	1995-08-23	< 2.0	—	—	< 0.5	—	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	—	—	—	—	—	—
WQ0561	1995-10-10	< 2.0	—	—	< 0.5	—	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	—	—	—	—	< 0.04	—
WQ0561	1996-05-13	< 2.0	—	—	< 0.5	—	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	< 5.00	—	—	—	< 0.04	—
WQ0561	1996-06-24	< 2.0	—	—	< 0.5	—	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	< 5.00	—	—	—	< 0.04	—
WQ0561	1996-09-30	< 2.0	—	—	< 0.5	—	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	< 5.00	—	—	—	< 0.04	—
WQ0561	1997-04-22	< 2.0	—	—	< 0.5	—	< 1.0	< 0.01	< 2.0	< 0.01	< 0.01	< 5.00	—	—	—	< 0.04	—
WQ0561	1997-08-26	< 0.2	—	—	< 0.1	—	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	—	—	—	< 0.04	< 0.1
WQ0561	1997-10-21	< 0.2	—	—	< 0.1	—	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	—	—	—	< 0.04	< 0.1
WQ0561	1998-04-27	< 0.2	—	—	< 0.1	—	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	—	—	—	< 0.04	< 0.1
WQ0561	1998-07-06	< 0.2	—	—	< 0.1	—	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	—	—	—	< 0.04	< 0.1
WQ0561	1998-10-14	< 0.2	—	—	< 0.1	—	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	—	—	—	< 0.04	< 0.1
WQ0561	1999-04-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Appendix 6. (Continued).

Site	Sample Date	Alachlor ug/L	Aldrin ug/L	Ampa ug/L	Atrazine ug/L	Azinphos Methyl ug/L	Bromacil ug/L	Bromoxynil ug/L	Carbofuran ug/L	Chlordane (Cis) ug/L	Chlordane (Trans) ug/L	Chlorothalonil ug/L	DDD ug/L	DDE ug/L	DDT ug/L	Deltamethrin ug/L	Diazinon ug/L
WQ0561	1999-07-06	< 0.2	---	---	< 0.1	---	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	---	---	---	< 0.04	< 0.1
WQ0561	1999-09-20	< 0.2	---	---	< 0.1	---	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	---	---	---	< 0.04	< 0.1
WQ0561	2000-04-18	< 0.2	---	---	< 0.1	---	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	---	---	---	< 0.04	< 0.1
WQ0561	2000-06-27	< 0.2	---	---	< 0.1	---	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	---	---	---	< 0.04	< 0.1
WQ0561	2000-10-04	< 0.2	---	---	< 0.1	---	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.50	---	---	---	< 0.04	< 0.1
WQ0561	2001-04-22	< 0.2	---	---	< 0.1	< 1.0	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.06	---	---	---	< 0.04	< 0.03
WQ0561	2001-07-16	< 0.2	---	---	< 0.1	< 1.0	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.06	---	---	---	< 0.04	< 0.03
WQ0561	2001-09-25	< 0.2	---	---	< 0.1	< 1.0	< 0.2	< 0.02	< 0.2	< 0.01	< 0.01	< 0.06	---	---	---	< 0.04	< 0.03
Fairford River																	
WQ0364	1978-01-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-02-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-04-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-05-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-06-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-07-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-10-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-11-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-12-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-01-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-02-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-04-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-05-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-05-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-06-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-07-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-08-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-10-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-10-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-11-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-12-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-01-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-02-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-03-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-04-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-05-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-06-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-07-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-08-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-09-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-10-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-11-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-12-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-01-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-02-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-03-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-04-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-05-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-06-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-07-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-08-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-09-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-10-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-11-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-12-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-01-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-02-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-03-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-04-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-05-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-07-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-08-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-09-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-10-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-11-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-12-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-02-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-03-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-04-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-05-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-06-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-08-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-08-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-10-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-11-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-11-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-12-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1984-02-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1984-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1994-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 6. (Continued).

Site	Sample Date	Dicamba ug/L	Diclofop ug/L	Diclofop-methyl ug/L	Dichloroprop 2,4-DP ug/L	Dieldrin ug/L	Dimethoate ug/L	Dinoseb ug/L	Dursban Chlorpyrophos-ethyl ug/L	Endosulfan I ug/L	Endrin ug/L	Eptam ug/L	Ethifluralin ug/L	Fenoxaprop ug/L	Glyphosate ug/L	HCH (Alpha) ug/L
Assiniboine Diversion est.																
WQ0014	1971-04-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1972-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1972-05-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1973 No Flow															
WQ0014	1974-04-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1974-05-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1974-06-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1975-05-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1976-05-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1977 No Flow															
WQ0391	1978-04-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1979-04-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1979-04-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1979-05-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1979-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1980 No Flow															
WQ0391	1981 No Flow															
WQ0391	1982-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1983-04-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1983-05-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1984 No Flow															
WQ0014	No Spring Sampl															
WQ0014	1985-11-13	---	---	< 0.04	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1986-04-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	May 86 No Flow															
WQ0014	1986-06-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1987-04-06	---	---	< 0.04	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1988 No Flow															
WQ0014	1989-04-04	0.06	---	< 0.09	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1990 No Flow															
WQ0014	1991 No Flow															
WQ0014	1992-04-07	< 0.02	---	< 0.09	< 0.10	< 0.02	---	< 0.05	---	< 0.01	< 0.02	---	---	---	---	< 0.02
WQ0014	1992-05-04	< 0.02	---	< 0.09	< 0.10	< 0.02	---	< 0.05	---	< 0.01	< 0.02	---	---	---	---	< 0.02
WQ0014	1993 Aug. Flow															
WQ0014	1993-08-09	< 0.02	---	< 0.09	< 0.10	< 0.02	< 1.0	< 0.05	< 0.8	< 0.01	< 0.02	---	---	---	---	< 0.02
WQ0014	1994-07-05	< 0.02	---	< 0.09	< 0.10	---	< 1.0	---	< 0.8	---	---	---	---	---	---	---
WQ0014	1994-08-09	< 0.02	---	< 0.09	< 0.10	---	< 1.0	---	< 0.8	---	---	---	---	---	---	---
WQ0014	1994-09-06	< 0.02	---	< 0.09	< 0.10	---	< 1.0	---	< 0.8	---	---	---	---	---	---	---
WQ0014	1995-04-05	< 0.02	---	< 0.09	< 0.10	---	< 1.0	---	< 0.8	---	---	---	---	---	---	---
WQ0014	1995-05-01	0.02	---	< 0.09	< 0.10	---	< 1.0	---	< 0.8	---	---	---	---	---	---	---
WQ0014	1996-04-02	< 0.02	---	< 0.09	< 0.10	---	< 1.0	---	< 0.8	---	---	< 5.0	< 0.02	---	---	---
WQ0014	1996-05-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1996-06-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1997-04-10	< 0.02	---	< 0.09	< 0.10	---	< 1.0	---	< 0.8	---	---	< 5.0	< 0.02	---	---	---
WQ0014	1997-05-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1998-04-08	< 0.02	< 0.1	< 0.09	< 0.05	---	< 0.2	< 0.05	< 0.1	---	---	< 0.2	< 0.02	< 0.1	---	---
WQ0014	1999-04-07	< 0.02	< 0.1	< 0.09	< 0.05	---	< 0.2	< 0.05	< 0.1	---	---	< 0.2	< 0.02	< 0.1	---	---
WQ0014	1999-04-13	< 0.02	< 0.1	< 0.09	< 0.05	---	< 0.2	< 0.05	< 0.1	---	---	< 0.2	< 0.02	< 0.1	---	---
WQ0014	1999-05-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1999-06-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	2000 No Flow															
WQ0014	2001-04-11	< 0.02	---	< 0.1	< 0.05	---	< 0.2	< 0.05	< 0.1	---	---	< 0.2	< 0.02	< 0.1	< 0.002	---
WQ0014	2001-05-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	2001-07-04	< 0.02	---	< 0.1	< 0.05	---	< 0.2	< 0.05	< 0.1	---	---	< 0.2	< 0.02	< 0.1	< 0.002	---
Whitemud River																
WQ0197	1973-05-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1973-07-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1973-10-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-01-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-01-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-04-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-08-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-10-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1975-02-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1975-09-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1975-11-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1976-02-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1976-04-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1976-07-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1976-09-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1977-01-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1977-04-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1977-07-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1977-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-01-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-02-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-03-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-04-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-05-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-07-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-08-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-09-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-10-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-11-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-12-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-01-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-02-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-03-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-04-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-04-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-05-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-07-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-08-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-09-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-10-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-11-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-12-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-01-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-02-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-04-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-04-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 6. (Continued).

Site	Sample Date	Dicamba	Diclofop	Diclofop-methyl	Dichloroprop 2,4-DP	Dieldrin	Dimethoate	Dinoseb	Dursban Chlorpyrophos-ethyl	Endosulfan I	Endrin	Eptam	Ethifluralin	Fenoxaprop	Glyphosate	HCH (Alpha)
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
WQ0197	1980-05-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-06-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-07-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-08-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-09-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-10-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-11-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-12-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-01-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-02-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-04-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-05-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-06-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-07-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-08-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-09-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-10-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-11-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-12-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-01-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-02-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-03-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-05-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-06-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-07-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-08-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-09-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-10-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-11-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-12-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-01-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-03-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-03-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-05-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-06-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-07-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-09-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-10-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-11-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-12-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1984-01-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1986-10-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1986-11-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-01-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-02-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-03-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-05-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-06-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-07-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-09-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-10-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-12-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-01-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-03-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-04-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-05-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-06-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-09-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-11-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-12-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-02-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-03-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-05-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-06-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-08-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-09-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-11-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-12-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-02-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-03-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-05-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-06-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-08-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-09-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-11-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-12-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-02-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-03-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-05-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-08-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-09-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1992-06-24	< 0.02	---	< 0.09	< 0.10	< 0.02	---	< 0.05	---	< 0.01	< 0.02	---	---	---	---	< 0.02
WQ0197	1992-09-30	< 0.02	---	< 0.09	< 0.10	< 0.02	< 1.0	< 0.05	< 0.8	< 0.01	< 0.02	---	---	---	---	< 0.02
WQ0197	1993-01-04	< 0.02	---	< 0.09	< 0.10	< 0.02	< 1.0	< 0.05	< 0.8	< 0.01	< 0.02	---	---	---	---	< 0.02
WQ0197	1993-04-15	< 0.02	---	< 0.09	< 0.10	< 0.02	< 1.0	< 0.05	< 0.8	< 0.01	< 0.02	---	---	---	---	< 0.02
WQ0197	1993-06-23	< 0.02	---	< 0.09	< 0.10	< 0.02	< 1.0	< 0.05	< 0.8	< 0.01	< 0.02	---	---	---	---	< 0.02
WQ0197	1993-09-29	0.02	---	< 0.09	< 0.10	< 0.02	< 1.0	< 0.05	< 0.8	< 0.01	< 0.02	---	---	---	---	< 0.02
WQ0197	1994-01-04	0.02	---	< 0.09	< 0.10	< 0.02	< 1.0	< 0.05	< 0.8	< 0.01	< 0.02	---	---	---	---	< 0.02
WQ0197	1994-04-05	< 0.02	---	< 0.09	< 0.10	< 0.02	< 1.0	---	< 0.8	< 0.01	< 0.02	---	---	---	---	< 0.02
WQ0197	1994-07-04	< 0.02	---	< 0.09	< 0.10	---	< 1.0	---	< 0.8	---	---	---	---	---	---	---
WQ0197	1994-10-03	< 0.02	---	< 0.09	< 0.10	---	< 1.0	---	< 0.8	---	---	---	---	---	---	---
WQ0197	1995-01-03	< 0.02	---	< 0.09	< 0.10	---	< 1.0	---	< 0.8	---	---	---	---	---	---	---
WQ0197	1995-04-04	< 0.02	---	< 0.09	< 0.10	---	< 1.0	---	< 0.8	---	---	---	---	---	---	---
WQ0197	1995-07-04	< 0.02	---	< 0.09	< 0.10	---	< 1.0	---	< 0.8	---	---	---	---	---	---	---
WQ0197	1995-10-03	< 0.02	---	< 0.09	< 0.10	---	< 1.0	---	< 0.8	---	---	---	< 0.02	---	---	---
WQ0197	1996-01-02	< 0.02	---	< 0.09	< 0.10	---	< 1.0	---	< 0.8	---	---	---	< 0.02	---	---	---
WQ0197	1996-04-01	< 0.02	---	< 0.09	< 0.10	---	< 1.0	---	< 0.8	---	---	< 5.0	< 0.02	---	---	---
WQ0197	1996-05-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1996-06-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1996-07-08	< 0.02	---	< 0.09	< 0.10	---	< 1.0	---	< 0.8	---	---	< 5.0	< 0.02	---	---	---

Appendix 6. (Continued).

Site	Sample Date	Dicamba ug/L	Diclofop ug/L	Diclofop-methyl ug/L	Dichloroprop 2,4-DP ug/L	Dieldrin ug/L	Dimethoate ug/L	Dinoseb ug/L	Dursban Chlorpyrophos-ethyl ug/L	Endosulfan I ug/L	Endrin ug/L	Eptam ug/L	Ethifluralin ug/L	Fenoxaprop ug/L	Glyphosate ug/L	HCH (Alpha) ug/L
WQ0197	1996-07-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1996-08-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1996-09-29	< 0.02	—	< 0.09	< 0.10	—	< 1.0	—	< 0.8	—	—	< 5.0	< 0.02	—	—	—
WQ0197	1997-01-06	< 0.02	—	< 0.09	< 0.10	—	< 1.0	—	< 0.8	—	—	< 5.0	< 0.02	—	—	—
WQ0197	1997-04-09	< 0.02	—	< 0.09	< 0.10	—	< 1.0	—	< 0.8	—	—	< 5.0	< 0.02	—	—	—
WQ0197	1997-05-13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-06-10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-07-07	< 0.02	< 0.1	< 0.09	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	—	—
WQ0197	1997-07-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-08-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-10-06	< 0.02	< 0.1	< 0.09	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	—	—
WQ0197	1998-01-05	< 0.02	< 0.1	< 0.09	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	—	—
WQ0197	1998-04-07	< 0.02	< 0.1	< 0.09	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	—	—
WQ0197	1998-05-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-06-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-07-06	< 0.02	< 0.1	< 0.09	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	—	—
WQ0197	1998-07-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-08-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-10-04	< 0.02	< 0.1	< 0.09	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	—	—
WQ0197	1999-04-06	< 0.02	< 0.1	< 0.09	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	—	—
WQ0197	1999-05-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-06-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-07-07	< 0.02	< 0.1	< 0.09	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	—	—
WQ0197	1999-07-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-08-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-10-04	< 0.02	< 0.1	< 0.09	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	—	—
WQ0197	2000-01-10	< 0.02	< 0.1	< 0.09	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	< 5	—
WQ0197	2000-04-03	< 0.02	< 0.1	—	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	< 0.005	—
WQ0197	2000-05-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-06-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-07-04	< 0.02	< 0.1	—	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	< 0.005	—
WQ0197	2000-07-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-08-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-10-02	< 0.02	< 0.1	—	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	< 0.005	—
WQ0197	2001-01-10	< 0.02	< 0.1	—	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	< 0.005	—
WQ0197	2001-04-10	< 0.02	—	< 0.1	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	< 0.002	—
WQ0197	2001-05-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-06-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-07-03	< 0.02	—	< 0.1	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	< 0.002	—
WQ0197	2001-07-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-08-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-10-01	< 0.02	—	< 0.1	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	< 0.002	—
Watemen River																
WQ0561	1981-08-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-09-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-10-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-11-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-12-07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-01-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-02-23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-03-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-05-26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-07-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-08-31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-09-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-10-28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-11-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-12-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-05-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-06-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-08-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-08-31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-10-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-11-02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-11-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-12-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1984-02-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1984-03-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1987-07-08	—	—	< 0.05	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1987-11-04	—	—	< 0.05	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1988-05-04	—	—	< 0.05	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1988-07-04	—	—	< 0.05	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1988-10-03	—	—	< 0.09	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1989-04-10	—	—	< 0.09	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1989-07-10	—	—	< 0.09	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1989-10-10	—	—	< 0.09	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1990-04-09	< 0.02	—	< 0.09	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1990-06-25	< 0.02	—	< 0.09	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1990-10-09	< 0.02	—	< 0.09	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1991-04-15	< 0.02	—	< 0.09	< 0.10	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1991-06-24	< 0.02	—	< 0.09	< 0.10	—	—	< 0.05	—	—	—	—	—	—	—	—
WQ0561	1991-09-30	< 0.02	—	< 0.09	< 0.10	—	—	< 0.05	—	—	—	—	—	—	—	—
WQ0561	1992-04-13	< 0.02	—	< 0.09	< 0.10	< 0.02	—	< 0.05	—	< 0.01	< 0.02	—	—	—	—	< 0.02
WQ0561	1992-06-22	< 0.02	—	< 0.09	< 0.10	< 0.02	—	< 0.05	—	< 0.01	< 0.02	—	—	—	—	< 0.02
WQ0561	1992-09-28	< 0.02	—	< 0.09	< 0.10	< 0.02	< 1.0	< 0.05	< 0.8	< 0.01	< 0.02	—	—	—	—	< 0.02
WQ0561	1993-04-13	< 0.02	—	< 0.09	< 0.10	< 0.02	< 1.0	< 0.05	< 0.8	< 0.01	< 0.02	—	—	—	—	< 0.02
WQ0561	1993-06-21	< 0.02	—	< 0.09	< 0.10	< 0.02	< 1.0	< 0.05	< 0.8	< 0.01	< 0.02	—	—	—	—	< 0.02
WQ0561	1993-09-27	< 0.02	—	< 0.09	< 0.10	< 0.02	< 1.0	< 0.05	< 0.8	< 0.01	< 0.02	—	—	—	—	< 0.02
WQ0561	1994-04-11	< 0.02	—	< 0.09	< 0.10	< 0.02	< 1.0	—	< 0.8	< 0.01	< 0.02	—	—	—	—	< 0.02
WQ0561	1994-06-27	< 0.02	—	< 0.09	< 0.10	—	< 1.0	—	< 0.8	—	—	—	—	—	—	—
WQ0561	1994-08-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1994-09-26	< 0.02	—	< 0.09	< 0.10	—	< 1.0	—	< 0.8	—	—	—	—	—	—	—
WQ0561	1995-04-18	< 0.02	—	< 0.09	< 0.10	—	< 1.0	—	< 0.8	—	—	—	—	—	—	—
WQ0561	1995-07-24	< 0.02	—	< 0.09	< 0.10	—	< 1.0	—	< 0.8	—	—	—	—	—	—	—
WQ0561	1995-08-23	< 0.02	—	< 0.09	< 0.10	—	< 1.0	—	< 0.8	—	—	—	—	—	—	—
WQ0561	1995-10-10	< 0.02	—	< 0.09	< 0.10	—	< 1.0	—	< 0.8	—	—	—	< 0.02	—	—	—
WQ0561	1996-05-13	< 0.02	—	< 0.09	< 0.10	—	< 1.0	—	< 0.8	—	—	< 5.0	< 0.02	—	—	—
WQ0561	1996-06-24	< 0.02	—	< 0.09	< 0.10	—	< 1.0	—	< 0.8	—	—	< 5.0	< 0.02	—	—	—
WQ0561	1996-09-30	< 0.02	—	< 0.09	< 0.10	—	< 1.0	—	< 0.8	—	—	< 5.0	< 0.02	—	—	—
WQ0561	1997-04-22	< 0.02	—	< 0.09	< 0.10	—	< 1.0	—	< 0.8	—	—	< 5.0	< 0.02	—	—	—
WQ0561	1997-06-26	< 0.02	< 0.1	< 0.09	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	—	—
WQ0561	1997-10-21	< 0.02	< 0.1	< 0.09	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	—	—
WQ0561	1998-04-27	< 0.02	< 0.1	< 0.09	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	—	—
WQ0561	1998-07-06	< 0.02	< 0.1	< 0.09	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	—	—
WQ0561	1998-10-14	< 0.02	< 0.1	< 0.09	< 0.05	—	< 0.2	< 0.05	< 0.1	—	—	< 0.2	< 0.02	< 0.1	—	—
WQ0561	1999-04-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Appendix 6. (Continued).

Site	Sample Date	Dicamba	Diclofop	Diclofop-methyl	Dichloroprop 2,4-DP	Dieldrin	Dimethoate	Dinoseb	Dursban Chlorpyrophos-ethyl	Endosulfan I	Endrin	Eptam	Ethifluralin	Fenoxaprop	Glyphosate	HCH (Alpha)
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
WQ0561	1999-07-06	< 0.02	< 0.1	< 0.09	< 0.05	---	< 0.2	< 0.05	< 0.1	---	---	< 0.2	< 0.02	< 0.1	---	---
WQ0561	1999-09-20	< 0.02	< 0.1	< 0.09	< 0.05	---	< 0.2	< 0.05	< 0.1	---	---	< 0.2	< 0.02	< 0.1	---	---
WQ0561	2000-04-18	< 0.02	< 0.1	---	< 0.05	---	< 0.2	< 0.05	< 0.1	---	---	< 0.2	< 0.02	< 0.1	---	---
WQ0561	2000-06-27	< 0.02	< 0.1	---	< 0.05	---	< 0.2	< 0.05	< 0.1	---	---	< 0.2	< 0.02	< 0.1	---	---
WQ0561	2000-10-04	< 0.02	< 0.1	---	< 0.05	---	< 0.2	< 0.05	< 0.1	---	---	< 0.2	< 0.02	< 0.1	---	---
WQ0561	2001-04-22	< 0.02	---	< 0.1	< 0.05	---	< 0.2	< 0.05	< 0.1	---	---	< 0.2	< 0.02	< 0.1	---	---
WQ0561	2001-07-16	< 0.02	---	< 0.1	< 0.05	---	< 0.2	< 0.05	< 0.1	---	---	< 0.2	< 0.02	< 0.1	---	---
WQ0561	2001-09-25	< 0.02	---	< 0.1	< 0.05	---	< 0.2	< 0.05	< 0.1	---	---	---	---	---	---	---
Fairford River																
WQ0364	1978-01-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-02-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-04-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-05-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-06-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-07-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-10-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-11-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-12-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-01-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-02-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-04-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-05-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-05-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-06-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-07-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-08-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-10-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-10-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-11-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-12-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-01-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-02-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-03-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-04-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-05-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-06-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-07-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-08-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-09-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-10-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-11-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-12-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-01-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-02-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-03-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-04-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-05-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-06-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-07-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-08-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-09-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-10-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-11-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-12-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-01-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-02-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-03-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-04-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-05-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-07-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-08-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-09-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-10-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-11-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-12-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-02-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-03-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-04-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-05-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-06-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-08-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-08-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-10-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-11-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-11-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-12-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1984-02-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1984-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1994-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 6. (Continued).

Site	Sample Date	HCH (Beta)	HCH (Delta)	HCH (Gamma) (Lindane)	Heptachlor	Heptachlor Epoxide	Imazamethabenz-me	Malathion	MCPA	MCPP	Methxychlor	Metribuzin	Metsulfuron-me	Mirex	Parathion Ethyl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Assiniboine Diversion est															
WQ0014	1971-04-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1972-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1972-05-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1973 No Flow														
WQ0014	1974-04-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1974-05-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1974-06-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1975-05-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1976-05-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1977 No Flow														
WQ0391	1978-04-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1979-04-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1979-04-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1979-05-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1979-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1980 No Flow														
WQ0391	1981 No Flow														
WQ0391	1982-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1983-04-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1983-05-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0391	1984 No Flow														
WQ0014	No Spring Sampl														
WQ0014	1985-11-13	< 0.02	---	< 0.001	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1986-04-09	---	---	< 0.001	---	---	---	---	---	---	---	---	---	---	---
WQ0014	May 86 No Flow														
WQ0014	1986-06-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1987-04-06	---	---	0.001	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1988 No Flow														
WQ0014	1989-04-04	---	---	< 0.02	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1990 No Flow														
WQ0014	1991 No Flow														
WQ0014	1992-04-07	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	---	---	< 10	---	< 0.04	< 1.0	---	< 0.02	---
WQ0014	1992-05-04	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	---	---	< 10	---	< 0.04	< 1.0	---	< 0.02	---
WQ0014	1993 Aug. Flow														
WQ0014	1993-08-09	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	---	< 0.9	< 10	---	< 0.04	< 1.0	---	< 0.02	< 0.9
WQ0014	1994-07-05	---	---	< 0.02	---	---	---	< 0.9	< 10	---	< 0.04	< 1.0	---	---	---
WQ0014	1994-08-09	---	---	< 0.02	---	---	---	< 0.9	< 10	---	< 0.04	< 1.0	---	---	---
WQ0014	1994-09-06	---	---	< 0.02	---	---	---	< 0.9	< 10	---	< 0.04	< 1.0	---	---	---
WQ0014	1995-04-05	---	---	< 0.02	---	---	---	< 0.9	< 10	---	< 0.04	< 1.0	---	---	---
WQ0014	1995-05-01	---	---	< 0.02	---	---	---	< 0.9	< 10	---	< 0.04	< 1.0	---	---	---
WQ0014	1996-04-02	---	---	< 0.02	---	---	---	< 0.9	< 10	---	< 0.04	< 1.0	---	---	---
WQ0014	1996-05-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1996-06-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1997-04-10	---	---	< 0.02	---	---	---	< 0.9	< 10	---	< 0.04	< 1.0	---	---	---
WQ0014	1997-05-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1998-04-08	---	---	< 0.02	---	---	---	< 0.2	< 0.05	---	< 0.04	< 0.2	---	---	---
WQ0014	1999-04-07	---	---	< 0.02	---	---	---	< 0.2	< 0.05	---	< 0.04	< 0.2	---	---	---
WQ0014	1999-04-13	---	---	< 0.02	---	---	---	< 0.2	< 0.05	---	< 0.04	< 0.2	---	---	---
WQ0014	1999-05-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	1999-06-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	2000 No Flow														
WQ0014	2001-04-11	---	---	< 0.01	---	---	---	< 0.2	< 0.05	< 0.05	< 0.04	< 0.2	---	---	< 0.2
WQ0014	2001-05-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0014	2001-07-04	---	---	< 0.01	---	---	---	< 0.2	< 0.05	< 0.05	< 0.04	< 0.2	---	---	< 0.2
Whitemud River										---					
WQ0197	1973-05-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1973-07-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1973-10-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-01-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-01-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-04-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-08-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1974-10-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1975-02-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1975-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1975-09-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1975-11-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1976-02-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1976-04-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1976-07-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1976-09-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1977-01-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1977-04-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1977-07-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1977-10-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-01-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-02-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-03-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-04-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-05-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-07-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-08-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-09-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-10-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-11-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1978-12-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-01-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-02-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-03-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-04-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-04-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-05-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-06-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-07-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-08-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-09-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-10-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-11-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1979-12-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-01-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-02-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-04-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-04-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 6. (Continued).

Site	Sample Date	HCH (Beta) ug/L	HCH (Delta) ug/L	HCH (Gamma) (Lindane) ug/L	Heptachlor ug/L	Heptachlor Epoxide ug/L	Imazamethabenz-me ug/L	Malathion ug/L	MCPA ug/L	MCPP ug/L	Methxychlor ug/L	Metribuzin ug/L	Metsulfuron-me ug/L	Mirex ug/L	Parathion Ethyl ug/L
WQ0197	1980-05-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-06-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-07-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-08-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-09-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-10-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-11-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-12-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-01-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-02-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-04-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-05-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-06-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-07-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-08-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-09-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-10-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-11-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-12-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-01-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-02-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-03-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-05-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-06-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-07-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-08-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-09-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-10-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-11-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-12-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-01-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-03-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-03-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-05-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-06-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-07-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-09-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-10-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-11-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-12-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1984-01-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1986-10-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1986-11-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-01-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-02-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-03-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-05-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-06-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-07-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-09-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-10-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-12-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-01-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-03-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-04-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-05-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-06-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-09-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-11-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-12-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-02-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-03-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-05-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-06-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-08-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-09-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-11-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-12-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-02-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-03-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-05-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-06-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-08-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-09-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-11-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-12-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-02-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-03-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-05-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-08-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-09-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1992-06-24	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	---	---	< 10	---	< 0.04	< 1.0	---	< 0.02	---
WQ0197	1992-09-30	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	---	< 0.9	< 10	---	< 0.04	< 1.0	---	< 0.02	< 0.9
WQ0197	1993-01-04	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	---	< 0.9	< 10	---	< 0.04	< 1.0	---	< 0.02	< 0.9
WQ0197	1993-04-15	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	---	< 0.9	< 10	---	< 0.04	< 1.0	---	< 0.02	< 0.9
WQ0197	1993-06-23	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	---	< 0.9	< 10	---	< 0.04	< 1.0	---	< 0.02	< 0.9
WQ0197	1993-09-29	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	---	< 0.9	< 10	---	< 0.04	< 1.0	---	< 0.02	< 0.9
WQ0197	1994-01-04	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	---	< 0.9	< 10	---	< 0.04	< 1.0	---	< 0.02	< 0.9
WQ0197	1994-04-05	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	---	< 0.9	< 10	---	< 0.04	< 1.0	---	< 0.02	< 0.9
WQ0197	1994-07-04	---	---	< 0.02	---	---	---	< 0.9	< 10	---	< 0.04	< 1.0	---	---	---
WQ0197	1994-10-03	---	---	< 0.02		---	---	< 0.9	< 10	---	< 0.04	< 1.0	---	---	---
WQ0197	1995-01-03	---	---	< 0.02	---	---	---	< 0.9	< 10	---	< 0.04	< 1.0	---	---	---
WQ0197	1995-04-04	---	---	< 0.02	---	---	---	< 0.9	< 10	---	< 0.04	< 1.0	---	---	---
WQ0197	1995-07-04	---	---	< 0.02	---	---	---	< 0.9	< 10	---	< 0.04	< 1.0	---	---	---
WQ0197	1995-10-03	---	---	< 0.02	---	---	---	< 0.9	< 10	---	< 0.04	< 1.0	---	---	---
WQ0197	1996-01-02	---	---	< 0.02	---	---	---	< 0.9	< 10	---	< 0.04	< 1.0	---	---	---
WQ0197	1996-04-01	---	---	< 0.02	---	---	---	< 0.9	< 10	---	< 0.04	< 1.0	---	---	---
WQ0197	1996-05-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1996-06-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1996-07-08	---	---	< 0.02	---	---	---	< 0.9	< 10	---	< 0.04	< 1.0	---	---	---

Appendix 6. (Continued).

Site	Sample Date	HCH (Beta) ug/L	HCH (Delta) ug/L	HCH (Gamma) (Lindane) ug/L	Heptachlor ug/L	Heptachlor Epoxide ug/L	Imazamethabenz-me ug/L	Malathion ug/L	MCPA ug/L	MCPP ug/L	Methxychlor ug/L	Metribuzin ug/L	Metsulfuron-me ug/L	Mirex ug/L	Parathion Ethyl ug/L
WQ0197	1996-07-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1996-08-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1996-09-29	—	—	< 0.02	—	—	—	< 0.9	< 10	—	< 0.04	< 1.0	—	—	—
WQ0197	1997-01-06	—	—	< 0.02	—	—	—	< 0.9	< 10	—	< 0.04	< 1.0	—	—	—
WQ0197	1997-04-09	—	—	< 0.02	—	—	—	< 0.9	< 10	—	< 0.04	< 1.0	—	—	—
WQ0197	1997-05-13	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-06-10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-07-07	—	—	< 0.02	—	—	—	< 0.2	0.06	—	< 0.04	< 0.2	—	—	—
WQ0197	1997-07-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-08-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1997-10-06	—	—	< 0.02	—	—	—	< 0.2	< 0.05	—	< 0.04	< 0.2	—	—	—
WQ0197	1998-01-05	—	—	< 0.02	—	—	—	< 0.2	< 0.05	—	< 0.04	< 0.2	—	—	—
WQ0197	1998-04-07	—	—	< 0.02	—	—	—	< 0.2	< 0.05	—	< 0.04	< 0.2	—	—	—
WQ0197	1998-05-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-06-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-07-06	—	—	< 0.02	—	—	—	< 0.2	0.14	—	< 0.04	< 0.2	—	—	—
WQ0197	1998-07-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-08-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1998-10-04	—	—	< 0.02	—	—	—	< 0.2	< 0.05	—	< 0.04	< 0.2	—	—	—
WQ0197	1999-04-06	—	—	< 0.02	—	—	—	< 0.2	< 0.05	—	< 0.04	< 0.2	—	—	—
WQ0197	1999-05-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-06-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-07-07	—	—	< 0.03	—	—	—	< 0.2	< 0.05	—	< 0.1	< 0.2	—	—	—
WQ0197	1999-07-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-08-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1999-10-04	—	—	< 0.02	—	—	—	< 0.2	< 0.05	—	< 0.04	< 0.2	—	—	—
WQ0197	2000-01-10	—	—	< 0.02	—	—	< 0.1	< 0.2	< 0.05	—	< 0.04	< 0.2	< 0.05	—	—
WQ0197	2000-04-03	—	—	< 0.02	—	—	< 0.0002	< 0.2	< 0.05	—	< 0.04	< 0.2	< 0.00005	—	—
WQ0197	2000-05-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-06-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-07-04	—	—	< 0.02	—	—	< 0.0005	< 0.2	< 0.05	—	< 0.04	< 0.2	< 0.00002	—	—
WQ0197	2000-07-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-08-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2000-10-02	—	—	< 0.02	—	—	< 0.0001	< 0.2	< 0.05	—	< 0.04	< 0.2	< 0.00001	—	—
WQ0197	2001-01-10	—	—	< 0.02	—	—	< 0.0001	< 0.2	< 0.05	—	< 0.04	< 0.2	< 0.00001	—	—
WQ0197	2001-04-10	—	—	< 0.01	—	—	—	< 0.2	< 0.05	< 0.05	< 0.04	< 0.2	—	—	< 0.2
WQ0197	2001-05-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-06-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-07-03	—	—	< 0.01	—	—	—	< 0.2	< 0.05	< 0.05	< 0.04	< 0.2	—	—	< 0.2
WQ0197	2001-07-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-08-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	2001-10-01	—	—	< 0.01	—	—	—	< 0.2	< 0.05	< 0.05	< 0.04	< 0.2	—	—	< 0.2
Waterhen River										—					
WQ0561	1981-08-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-09-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-10-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-11-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1981-12-07	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-01-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-02-23	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-03-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-05-26	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-07-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-08-31	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-09-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-10-28	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-11-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1982-12-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-05-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-06-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-08-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-08-31	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-10-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-11-02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-11-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1983-12-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1984-02-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1984-03-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1987-07-08	—	—	< 0.01	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1987-11-04	—	—	< 0.01	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1988-05-04	—	—	< 0.01	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1988-07-04	—	—	< 0.01	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1988-10-03	—	—	< 0.02	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1989-04-10	—	—	< 0.02	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1989-07-10	—	—	< 0.02	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1989-10-10	—	—	< 0.02	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1990-04-09	—	—	0.02	—	—	—	—	< 10	—	—	< 1.0	—	—	—
WQ0561	1990-06-25	—	—	< 0.02	—	—	—	—	< 10	—	—	< 1.0	—	—	—
WQ0561	1990-10-09	—	—	< 0.02	—	—	—	—	< 10	—	—	< 1.0	—	—	—
WQ0561	1991-04-15	—	—	< 0.02	—	—	—	—	< 10	—	—	< 1.0	—	—	—
WQ0561	1991-06-24	—	—	< 0.02	—	—	—	—	< 10	—	—	< 1.0	—	—	—
WQ0561	1991-09-30	—	—	< 0.02	—	—	—	—	< 10	—	—	< 1.0	—	—	—
WQ0561	1992-04-13	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	—	—	< 10	—	< 0.04	< 1.0	—	< 0.02	—
WQ0561	1992-06-22	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	—	—	< 10	—	< 0.04	< 1.0	—	< 0.02	—
WQ0561	1992-09-28	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	—	< 0.9	< 10	—	< 0.04	< 1.0	—	< 0.02	< 0.9
WQ0561	1993-04-13	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	—	< 0.9	< 10	—	< 0.04	< 1.0	—	< 0.02	< 0.9
WQ0561	1993-06-21	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	—	< 0.9	< 10	—	< 0.04	< 1.0	—	< 0.02	< 0.9
WQ0561	1993-09-27	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	—	< 0.9	< 10	—	< 0.04	< 1.0	—	< 0.02	< 0.9
WQ0561	1994-04-11	< 0.03	< 0.01	< 0.02	< 0.02	< 0.01	—	< 0.9	< 10	—	< 0.04	< 1.0	—	< 0.02	< 0.9
WQ0561	1994-06-27	—	—	< 0.02	—	—	—	< 0.9	< 10	—	< 0.04	< 1.0	—	—	—
WQ0561	1994-08-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0561	1994-09-26	—	—	< 0.02	—	—	—	< 0.9	< 10	—	< 0.04	< 1.0	—	—	—
WQ0561	1995-04-18	—	—	< 0.02	—	—	—	< 0.9	< 10	—	< 0.04	< 1.0	—	—	—
WQ0561	1995-07-24	—	—	< 0.02	—	—	—	< 0.9	< 10	—	< 0.04	< 1.0	—	—	—
WQ0561	1995-08-23	—	—	< 0.02	—	—	—	< 0.9	< 10	—	< 0.04	< 1.0	—	—	—
WQ0561	1995-10-10	—	—	< 0.02	—	—	—	< 0.9	< 10	—	< 0.04	< 1.0	—	—	—
WQ0561	1996-05-13	—	—	< 0.02	—	—	—	< 0.9	< 10	—	< 0.04	< 1.0	—	—	—
WQ0561	1996-06-24	—	—	< 0.02	—	—	—	< 0.9	< 10	—	< 0.04	< 1.0	—	—	—
WQ0561	1996-09-30	—	—	< 0.02	—	—	—	< 0.9	< 10	—	< 0.04	< 1.0	—	—	—
WQ0561	1997-04-22	—	—	< 0.02	—	—	—	< 0.9	< 10	—	< 0.04	< 1.0	—	—	—
WQ0561	1997-06-26	—	—	< 0.02	—	—	—	< 0.2	< 0.05	—	< 0.04	< 0.2	—	—	—
WQ0561	1997-10-21	—	—	< 0.02	—	—	—	< 0.2	< 0.05	—	< 0.04	< 0.2	—	—	—
WQ0561	1998-04-27	—	—	< 0.02	—	—	—	< 0.2	< 0.05	—	< 0.04	< 0.2	—	—	—
WQ0561	1998-07-06	—	—	< 0.02	—	—	—	< 0.2	< 0.05	—	< 0.04	< 0.2	—	—	—
WQ0561	1998-10-14	—	—	< 0.02	—	—	—	< 0.2	< 0.05	—	< 0.04	< 0.2	—	—	—
WQ0561	1999-04-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Appendix 6. (Continued).

Site	Sample Date	HCH (Beta) ug/L	HCH (Delta) ug/L	HCH (Gamma) (Lindane) ug/L	Heptachlor ug/L	Heptachlor Epoxide ug/L	Imazamethabenz-me ug/L	Malathion ug/L	MCPA ug/L	MCPP ug/L	Methxychlor ug/L	Metribuzin ug/L	Metsulfuron-me ug/L	Mirex ug/L	Parathion Ethyl ug/L
WQ0561	1999-07-06	---	---	< 0.02	---	---	---	< 0.2	< 0.05	---	< 0.04	< 0.2	---	---	---
WQ0561	1999-09-20	---	---	< 0.02	---	---	---	< 0.2	< 0.05	---	< 0.04	< 0.2	---	---	---
WQ0561	2000-04-18	---	---	< 0.02	---	---	---	< 0.2	< 0.05	---	< 0.04	< 0.2	---	---	---
WQ0561	2000-06-27	---	---	< 0.02	---	---	---	< 0.2	< 0.05	---	< 0.04	< 0.2	---	---	---
WQ0561	2000-10-04	---	---	< 0.02	---	---	---	< 0.2	< 0.05	---	< 0.04	< 0.2	---	---	---
WQ0561	2001-04-22	---	---	< 0.01	---	---	---	< 0.2	< 0.05	< 0.05	< 0.04	< 0.2	---	---	< 0.2
WQ0561	2001-07-16	---	---	< 0.01	---	---	---	< 0.2	< 0.05	< 0.05	< 0.04	< 0.2	---	---	< 0.2
WQ0561	2001-09-25	---	---	< 0.01	---	---	---	< 0.2	< 0.05	< 0.05	< 0.04	< 0.2	---	---	< 0.2
Fairford River										---					
WQ0364	1978-01-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-02-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-04-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-05-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-06-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-07-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-10-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-11-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-12-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-01-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-02-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-04-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-05-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-05-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-06-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-07-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-08-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-10-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-10-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-11-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-12-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-01-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-02-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-03-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-04-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-05-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-06-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-07-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-08-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-09-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-10-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-11-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-12-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-01-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-02-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-03-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-04-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-05-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-06-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-07-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-08-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-09-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-10-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-11-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-12-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-01-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-02-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-03-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-04-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-05-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-07-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-08-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-09-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-10-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-11-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-12-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-02-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-03-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-04-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-05-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-06-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-08-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-08-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-10-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-11-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-11-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-12-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1984-02-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1984-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1994-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 6. (Continued).

Site	Sample Date	Parathion Methyl	PCP Pentachlorophenol	Phenolics Total	Picloram	Propanil	Propachlor	Propoxur	Quizalofop	Simazine	Terbufos	Thifensulfuron-me	Triallate	Tribenuron-me	Triclopyr	Trifluralin
		ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Assiniboine Diversion est																
WQ0014	1971-04-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1972-04-27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1972-05-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1973 No Flow															
WQ0014	1974-04-05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1974-05-02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1974-06-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1975-05-27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1976-05-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1977 No Flow															
WQ0391	1978-04-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1979-04-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1979-04-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1979-05-17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1979-06-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1980 No Flow															
WQ0391	1981 No Flow															
WQ0391	1982-04-27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1983-04-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1983-05-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0391	1984 No Flow															
WQ0014	No Spring Sampl															
WQ0014	1985-11-13	—	—	—	—	—	—	—	—	—	—	—	< 1.0	—	—	< 0.006
WQ0014	1986-04-09	—	—	—	< 0.10	< 1.0	—	—	—	—	—	—	< 1.0	—	—	< 0.006
WQ0014	May 86 No Flow															
WQ0014	1986-06-02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1987-04-06	—	—	—	< 0.2	< 1.0	—	—	—	—	—	—	< 1.0	—	—	< 0.006
WQ0014	1988 No Flow															
WQ0014	1989-04-04	—	—	—	< 0.2	< 1.0	—	—	—	—	—	—	< 1.0	—	—	< 0.03
WQ0014	1990 No Flow															
WQ0014	1991 No Flow															
WQ0014	1992-04-07	—	—	—	< 0.2	< 2.0	< 2.0	< 2.0	—	< 0.5	—	—	< 1.0	—	< 0.02	< 0.03
WQ0014	1992-05-04	—	—	—	< 0.2	< 2.0	< 2.0	< 2.0	—	< 0.5	—	—	< 1.0	—	< 0.02	< 0.03
WQ0014	1993 Aug. Flow															
WQ0014	1993-08-09	< 0.6	—	—	< 0.2	< 2.0	< 2.0	< 2.0	—	< 0.5	< 0.7	—	< 1.0	—	< 0.02	< 0.03
WQ0014	1994-07-05	—	—	—	< 0.2	< 2.0	—	< 2.0	—	< 0.5	< 0.7	—	< 1.0	—	< 0.02	< 0.03
WQ0014	1994-08-09	—	—	—	< 0.2	< 2.0	—	< 2.0	—	< 0.5	< 0.7	—	< 1.0	—	< 0.02	< 0.03
WQ0014	1994-09-06	—	—	—	< 0.2	< 2.0	—	< 2.0	—	< 0.5	< 0.7	—	< 1.0	—	< 0.02	< 0.03
WQ0014	1995-04-05	—	—	—	< 0.2	< 2.0	—	< 2.0	—	< 0.5	< 0.7	—	< 1.0	—	< 0.02	< 0.03
WQ0014	1995-05-01	—	—	—	< 0.2	< 2.0	—	< 2.0	—	< 0.5	< 0.7	—	< 1.0	—	< 0.02	< 0.03
WQ0014	1996-04-02	—	—	—	< 0.2	< 2.0	—	< 2.0	—	< 0.5	< 0.7	—	< 1.0	—	< 0.02	< 0.03
WQ0014	1996-05-06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1996-06-10	—		—	—	—	—	—	—	—	—	—	—	—	—	
WQ0014	1997-04-10	—	—	—	< 0.2	< 2.0	—	< 2.0	—	< 0.5	< 0.7	—	< 1.0	—	< 0.02	< 0.03
WQ0014	1997-05-05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1998-04-08	—	< 0.02		< 0.2	< 0.2	—	< 0.2	< 0.1	< 0.1	< 0.5	—	< 0.2	—	< 0.05	< 0.03
WQ0014	1999-04-07	—	< 0.02	0.005	< 0.2	< 0.2	—	< 0.2	< 0.1	< 0.1	< 0.5	—	< 0.2	—	< 0.05	< 0.03
WQ0014	1999-04-13	—	< 0.02	0.004	< 0.2	< 0.2	—	< 0.2	< 0.1	< 0.1	< 0.5	—	< 0.2	—	< 0.05	< 0.03
WQ0014	1999-05-03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	1999-06-01	—	—	—	—	—	—	—	—	—	—	—	—	—		
WQ0014	2000 No Flow															
WQ0014	2001-04-11	< 0.2	< 0.02	< 0.001	< 0.2	< 0.2	< 0.2	< 0.2	< 0.1	< 0.1	< 0.5	—	< 0.1	—	< 0.05	< 0.03
WQ0014	2001-05-07	—	—	0.002	—	—	—	—	—	—	—	—	—	—	—	—
WQ0014	2001-07-04	< 0.2	< 0.02	< 0.001	< 0.2	< 0.2	< 0.2	< 0.2	< 0.1	< 0.1	< 0.5	—	< 0.1	—	< 0.05	< 0.03
Whitemud River																
WQ0197	1973-05-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1973-07-26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1973-10-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1974-01-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1974-01-31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1974-04-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1974-08-26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1974-10-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1975-02-11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1975-06-03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1975-09-03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1975-11-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1976-02-11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1976-04-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1976-07-05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1976-09-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1977-01-05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1977-04-28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1977-07-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1977-10-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-01-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-02-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-03-29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-04-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-05-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-06-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-07-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-08-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-09-21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-10-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-11-09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1978-12-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-01-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-02-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-03-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-04-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-04-30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-05-17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-06-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-07-19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-08-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-09-24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-10-16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-11-08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1979-12-03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-01-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-02-18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-03-20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-04-09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WQ0197	1980-04-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Appendix 6. (Continued).

Site	Sample Date	Parathion Methyl ug/L	PCP Pentachlorophenol ug/L	Phenolics Total mg/L	Picloram ug/L	Propanil ug/L	Propachlor ug/L	Propoxur ug/L	Quizalofop ug/L	Simazine ug/L	Terbufos ug/L	Thifensulfuron-me ug/L	Triallate ug/L	Tribenuron-me ug/L	Triclopyr ug/L	Trifluralin ug/L
WQ0197	1980-05-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-06-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-07-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-08-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-09-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-10-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-11-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1980-12-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-01-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-02-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-03-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-04-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-05-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-06-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-07-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-08-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-09-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-10-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-11-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1981-12-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-01-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-02-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-03-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-05-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-06-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-07-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-08-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-09-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-10-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-11-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1982-12-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-01-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-03-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-03-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-04-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-05-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-06-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-07-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-09-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-10-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-11-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1983-12-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1984-01-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1986-10-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1986-11-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-01-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-02-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-03-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-05-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-06-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-07-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-09-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-10-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1987-12-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-01-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-03-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-04-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-05-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-06-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-09-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-11-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1988-12-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-02-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-03-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-05-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-06-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-08-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-09-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-11-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1989-12-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-02-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-03-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-05-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-06-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-08-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-09-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-11-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1990-12-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-02-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-03-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-05-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-06-03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-08-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1991-09-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1992-06-24	---	---	---	< 0.2	< 2.0	< 2.0	< 2.0	---	< 0.5	---	---	< 1.0	---	< 0.02	< 0.03
WQ0197	1992-09-30	< 0.6	---	---	< 0.2	< 2.0	< 2.0	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0197	1993-01-04	< 0.6	---	---	< 0.2	< 2.0	< 2.0	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0197	1993-04-15	< 0.6	---	---	< 0.2	< 2.0	< 2.0	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	0.02	< 0.03
WQ0197	1993-06-23	< 0.6	---	---	< 0.2	< 2.0	< 2.0	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0197	1993-09-29	< 0.6	---	---	< 0.2	< 2.0	< 2.0	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0197	1994-01-04	< 0.6	---	---	< 0.2	< 2.0	< 2.0	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0197	1994-04-05	< 0.6	---	---	< 0.2	< 2.0	< 2.0	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0197	1994-07-04	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0197	1994-10-03	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0197	1995-01-03	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0197	1995-04-04	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0197	1995-07-04	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0197	1995-10-03	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0197	1996-01-02	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0197	1996-04-01	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0197	1996-05-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1996-06-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1996-07-08	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03

Appendix 6. (Continued).

Site	Sample Date	Parathion Methyl ug/L	PCP Pentachlorophenol ug/L	Phenolics Total mg/L	Picloram ug/L	Propanil ug/L	Propachlor ug/L	Propoxur ug/L	Quizalofop ug/L	Simazine ug/L	Terbufos ug/L	Thifensulfuron-me ug/L	Triallate ug/L	Tribenuron-me ug/L	Triclopyr ug/L	Trifluralin ug/L
WQ0197	1996-07-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1996-08-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1996-09-29	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0197	1997-01-06	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0197	1997-04-09	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0197	1997-05-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1997-06-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1997-07-07	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.2	---	< 0.05	< 0.03
WQ0197	1997-07-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1997-08-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1997-10-06	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.2	---	< 0.05	< 0.03
WQ0197	1998-01-05	---	0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.2	---	< 0.05	< 0.03
WQ0197	1998-04-07	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.2	---	< 0.05	< 0.03
WQ0197	1998-05-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1998-06-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1998-07-06	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.2	---	< 0.05	< 0.03
WQ0197	1998-07-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1998-08-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1998-10-04	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.2	---	< 0.05	< 0.03
WQ0197	1999-04-06	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.2	---	< 0.05	< 0.03
WQ0197	1999-05-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1999-06-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1999-07-07	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.2	---	< 0.05	< 0.03
WQ0197	1999-07-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1999-08-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	1999-10-04	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.2	---	< 0.05	< 0.03
WQ0197	2000-01-10	---	0.03	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	< 0.05000	< 0.2	< 0.05	< 0.05	< 0.03
WQ0197	2000-04-03	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	< 0.00005	< 0.2	< 0.00005	< 0.05	< 0.03
WQ0197	2000-05-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	2000-06-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	2000-07-04	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	< 0.00002	< 0.2	< 0.00002	< 0.05	< 0.03
WQ0197	2000-07-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	2000-08-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	2000-10-02	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	< 0.00001	< 0.2	< 0.00001	< 0.05	< 0.03
WQ0197	2001-01-10	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	< 0.00001	< 0.2	< 0.00001	< 0.05	< 0.03
WQ0197	2001-04-10	< 0.2	< 0.02	---	< 0.2	< 0.2	< 0.2	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.1	---	< 0.05	< 0.03
WQ0197	2001-05-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	2001-06-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	2001-07-03	< 0.2	< 0.02	---	< 0.2	< 0.2	< 0.2	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.1	---	< 0.05	< 0.03
WQ0197	2001-07-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	2001-08-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0197	2001-10-01	< 0.2	< 0.02	---	< 0.2	< 0.2	< 0.2	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.1	---	< 0.05	< 0.03
Waterhen River																
WQ0561	1981-08-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1981-09-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1981-10-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1981-11-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1981-12-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-01-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-02-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-03-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-05-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-07-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-08-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-09-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-10-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-11-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1982-12-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1983-05-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1983-06-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1983-08-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1983-08-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1983-10-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1983-11-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1983-11-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1983-12-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1984-02-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1984-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1987-07-08	---	---	---	< 0.2	< 1.0	---	---	---	---	---	---	< 1.0	---	---	< 0.01
WQ0561	1987-11-04	---	---	---	< 0.2	< 1.0	---	---	---	---	---	---	< 1.0	---	---	< 0.01
WQ0561	1988-05-04	---	---	---	< 0.2	< 1.0	---	---	---	---	---	---	< 1.0	---	---	0.01
WQ0561	1988-07-04	---	---	---	< 0.2	< 1.0	---	---	---	< 0.5	---	---	< 1.0	---	---	< 0.01
WQ0561	1988-10-03	---	---	---	< 0.4	< 1.0	---	---	---	---	---	---	< 1.0	---	---	< 0.03
WQ0561	1989-04-10	---	---	---	< 0.2	< 1.0	---	---	---	< 0.5	---	---	< 1.0	---	---	< 0.03
WQ0561	1989-07-10	---	---	---	< 0.2	< 1.0	---	---	---	---	---	---	< 1.0	---	---	< 0.03
WQ0561	1989-10-10	---	---	---	< 0.2	< 1.0	---	---	---	< 0.5	---	---	< 1.0	---	---	< 0.03
WQ0561	1990-04-09	---	---	---	< 0.2	< 2.0	---	---	---	< 0.5	---	---	< 1.0	---	---	< 0.03
WQ0561	1990-06-25	---	---	---	< 0.2	< 2.0	< 2.0	---	---	< 0.5	---	---	< 1.0	---	---	< 0.03
WQ0561	1990-10-09	---	---	---	< 0.2	< 2.0	< 2.0	---	---	< 0.5	---	---	< 1.0	---	---	< 0.03
WQ0561	1991-04-15	---	---	---	< 0.2	< 2.0	< 2.0	---	---	< 0.5	---	---	< 1.0	---	---	< 0.03
WQ0561	1991-06-24	---	---	---	< 0.2	< 2.0	< 2.0	---	---	< 0.5	---	---	< 1.0	---	---	< 0.03
WQ0561	1991-09-30	---	---	---	< 0.2	< 2.0	< 2.0	---	---	< 0.5	---	---	< 1.0	---	---	< 0.03
WQ0561	1992-04-13	---	---	---	< 0.2	< 2.0	< 2.0	< 2.0	---	< 0.5	---	---	< 1.0	---	< 0.02	< 0.03
WQ0561	1992-06-22	---	---	---	< 0.2	< 2.0	< 2.0	< 2.0	---	< 0.5	---	---	< 1.0	---	< 0.02	< 0.03
WQ0561	1992-09-28	< 0.6	---	---	< 0.2	< 2.0	< 2.0	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0561	1993-04-13	< 0.6	---	---	< 0.2	< 2.0	< 2.0	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0561	1993-06-21	< 0.6	---	---	< 0.2	< 2.0	< 2.0	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0561	1993-09-27	< 0.6	---	---	< 0.2	< 2.0	< 2.0	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0561	1994-04-11	< 0.6	---	---	< 0.2	< 2.0	< 2.0	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0561	1994-06-27	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0561	1994-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0561	1994-09-26	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0561	1995-04-18	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0561	1995-07-24	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0561	1995-08-23	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0561	1995-10-10	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0561	1996-05-13	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0561	1996-06-24	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0561	1996-09-30	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0561	1997-04-22	---	---	---	< 0.2	< 2.0	---	< 2.0	---	< 0.5	< 0.7	---	< 1.0	---	< 0.02	< 0.03
WQ0561	1997-06-26	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.2	---	< 0.05	< 0.03
WQ0561	1997-10-21	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.2	---	< 0.05	< 0.03
WQ0561	1998-04-27	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.2	---	< 0.05	< 0.03
WQ0561	1998-07-06	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.2	---	< 0.05	< 0.03
WQ0561	1998-10-14	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.2	---	< 0.05	< 0.03
WQ0561	1999-04-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 6. (Continued).

Site	Sample Date	Parathion Methyl	PCP Pentachlorophenol	Phenolics Total	Picloram	Propanil	Propachlor	Propoxur	Quizalofop	Simazine	Terbufos	Thifensulfuron-me	Triallate	Tribenuron-me	Triclopyr	Trifluralin
		ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
WQ0561	1999-07-06	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.2	---	< 0.05	< 0.03
WQ0561	1999-09-20	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.2	---	< 0.05	< 0.03
WQ0561	2000-04-18	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.2	---	< 0.05	< 0.03
WQ0561	2000-06-27	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.2	---	< 0.05	< 0.03
WQ0561	2000-10-04	---	< 0.02	---	< 0.2	< 0.2	---	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.2	---	< 0.05	< 0.03
WQ0561	2001-04-22	< 0.2	< 0.02	---	< 0.2	< 0.2	< 0.2	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.1	---	< 0.05	< 0.03
WQ0561	2001-07-16	< 0.2	0.06	---	< 0.2	< 0.2	< 0.2	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.1	---	< 0.05	< 0.03
WQ0561	2001-09-25	< 0.2	< 0.02	---	< 0.2	< 0.2	< 0.2	< 0.2	< 0.1	< 0.1	< 0.5	---	< 0.1	---	< 0.05	< 0.03
Fairford River				---												
WQ0364	1978-01-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-02-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-04-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-05-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-06-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-07-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-09-26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-10-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-11-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1978-12-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-01-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-02-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-04-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-05-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-05-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-06-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-07-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-08-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-10-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-10-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-11-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1979-12-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-01-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-02-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-03-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-04-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-05-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-06-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-07-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-08-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-09-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-10-21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-11-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1980-12-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-01-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-02-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-03-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-04-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-05-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-06-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-07-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-08-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-09-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-10-19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-11-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1981-12-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-01-25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-02-23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-03-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-04-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-05-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-07-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-08-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-09-28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-10-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-11-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1982-12-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-02-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-03-24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-04-18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-05-27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-06-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-08-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-08-31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-10-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-11-02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-11-30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1983-12-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1984-02-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1984-03-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WQ0364	1994-08-29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Appendix 7. Average annual inflow, outflow, precipitation and evaporation for Lake Manitoba[1] from 1972 through 2001.

Year	Waterhen River Inflow m^3	Portage la Prairie Diversion Inflow m^3	Whitemud River Inflow m^3	Local Inflow m^3	Fairford River Outflow m^3	Precipitation Input m^3	Evaporation Export m^3
1972	3016598150	304678933	209858071	132210585	2609384190	1571086740	2494158474
1973	2234318701	0	91087333	57385020	1711906055	2368285056	2400918905
1974	2620993360	657808107	394711777	248668419	5400050033	1822833577	2689961570
1975	3643493325	514850171	265224882	167091676	4842809878	3184131286	2391594948
1976	3307720411	1752118556	475975966	299864859	4966938695	1622368503	2899750600
1977	2256644028	0	77692137	48946046	1570809990	2731919376	2512806388
1978	2103938793	4210618	139310039	87765325	1661004310	2251735595	2578074087
1979	2778163660	651862842	529556750	333620753	4848167956	2223763724	2545440237
1980	2116440976	0	81264189	51196439	1985168054	2540778259	2703947505
1981	1057327475	0	73227072	46133055	783172462	2214439767	2550102216
1982	1070722671	36332176	112519647	70887377	524198672	2167819982	2550102216
1983	2262002106	288731922	230397372	145150344	1858360198	1743579943	2554764194
1984	2925510817	0	69655019	43882662	1820853649	2750567289	2442876711
1985	2822814314	55029178	101803490	64136199	2491506465	2219101745	2284369444
1986	2767447503	115898417	289336235	182281828	3767622142	2414904841	2284369444
1987	2571877641	146126298	170565496	107456263	2007493381	1962692930	2335651207
1988	2741550124	0	37238645	23460346	1342198644	1832157533	2820496966
1989	1442216108	9845163	36167029	22785228	711731417	1948706995	2573412108
1990	1816388584	0	59028164	37187743	1397565454	2051270521	2573412108
1991	1087689919	0	58760260	37018964	803711763	2717933440	2773877182
1992	1060006514	170873769	152705235	96204298	861757612	1715608072	2400918905
1993	1418997768	5810701	88854800	55978524	605462861	2223763724	2330989228
1994	2052144035	184880618	71173142	44839079	950165906	1874115340	2242411638
1995	2291471537	1375342885	292015274	183969623	2812098157	2512806388	2396256927
1996	3237172378	759088022	339344967	213787329	4501678885	2675975634	2298355379
1997	3998912527	770892921	101803490	64136199	4710643944	1864791383	2466186604
1998	3591698567	65018691	171458509	108018861	3539903809	2428890776	2228425702
1999	2651355804	1127679778	236648464	149088532	4369512951	2578074087	2293693401
2000	1919978100	0	178602614	112519647	1735124395	2559426173	2428890776
2001	1609999652	757531977	616740900	777093534	3898665925	2354298606	2564087957

1. Data supplied by A. Warkentin (2002).